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U. S. DEPARTMENT OF AGRICULTURE,

OFFICE OF EXPERIMENT STATIONS,

A. C. TRUE, DIRECTOR.

THE FARMERS' INSTITUTES IN THE UNITED STATES, 1908.

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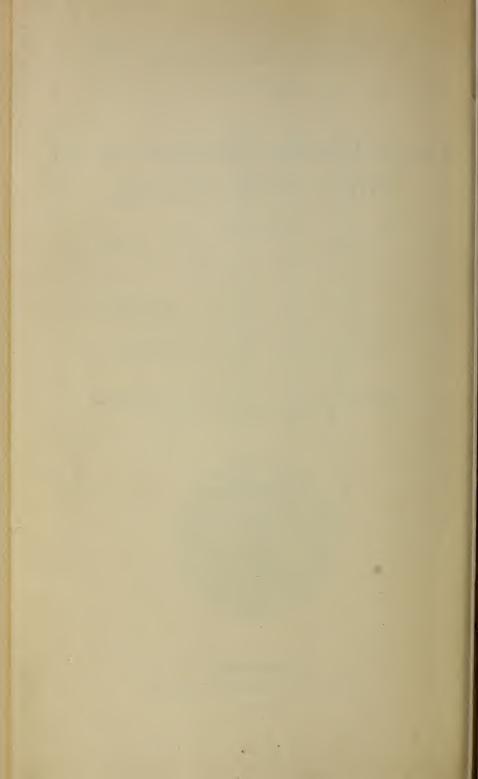
JOHN HAMILTON,

Farmers' Institute Specialist, Office of Experiment Stations.

[Reprint from Annual Report of the Office of Experiment Stations for the year ended June 30, 1908.]

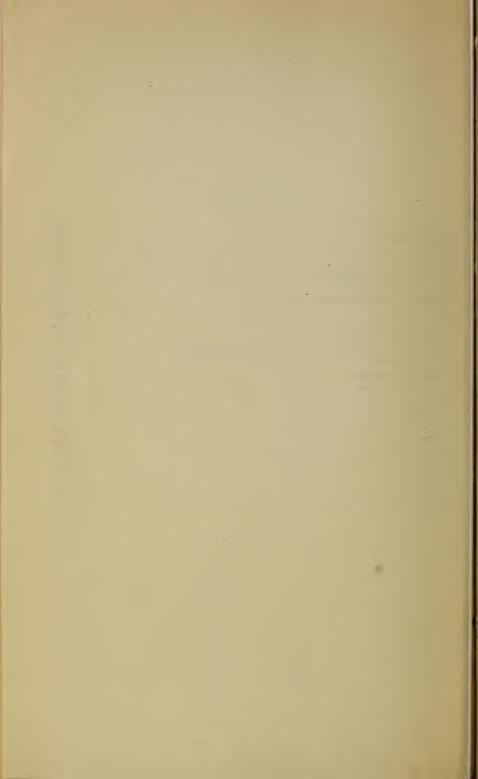


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THE FARMERS' INSTITUTES IN THE UNITED STATES, 1908.

By John Hamilton,

Farmers' Institute Specialist, Office of Experiment Stations.

Farmers' institutes have been held during the past year in all of the States excepting Louisiana and Nevada, and in all the Territories excepting Alaska and Porto Rico. Although an appropriation of \$2,000 was made for farmers' institutes in the State of Louisiana none was held, owing to the fact that the commissioner of agriculture, who is in charge of this work, was unable, because of the pressure of other duties, to undertake it.

In both Alaska and Porto Rico the institutes can not be said to have been undertaken in the form in which this work is conducted in the States. However, the directors of the experiment stations in these Territories have performed practical institute service by visiting the farmers and giving them instruction at their homes.

INSTITUTES HELD.

Reports have been received from 49 States and Territories, and in 46 of these institutes were held. The reports show marked progress in institute activity in all directions, in increased attendance, in the number of institutes and sessions of institutes held, and in the amount of money appropriated for institute work. In 45 States and Territories the number of institutes held is given at 4,643. Forty-two of these States and Territories held, in 1908, 4,542 institutes. The same 42 States and Territories, in 1907, held 3,870 institutes, an increase in 1908 of 672 institutes.

A comparison of the number of one-day, two-day, and three-day institutes held in 1908 with those of similar duration held in 1907 shows a general tendency toward increasing the number of one-day meetings. The 45 States reporting held, in 1908, 2,737 one-day institutes, 1,808 two-day institutes, and 98 three-day institutes. This represents an increase over 1907 of 674 one-day institutes, 24 two-day institutes, and 18 three-day institutes. Forty-five States report for 1908 the total number of days of institutes held at 6,528, an increase over 1907 of 670 days.

SESSIONS.

Forty-four States held 14,934 sessions of institutes in 1908. Comparing the number of sessions held in 42 of these States with the number held by them in 1907, an increase is shown for 1908 of 3,173 sessions, or 27.8 per cent. Inasmuch as the institute session is the proper unit for estimating institute progress, the large number held during the past year above the previous year is convincing proof of increasing interest and of rapid extension in this work.

ATTENDANCE.

The total attendance reported by 44 States for 1908 amounted to 2,098,268. Forty-two of these States, in 1907, reported an attendance of 1,589,852. The same 42 States, in 1908, report an attendance of 2,059,342, an increase in 1908 of 469,490.

Forty-four States report for 1908 an average attendance per session of 140. The attendance in 42 of these States in 1908 averaged 141, and the same 42 States in 1907 averaged 139.

APPROPRIATIONS FOR INSTITUTES.

The total appropriations for the year from all sources is given by 47 States and Territories at \$325,569.54, an increase of \$41,118.87 over 1907.

THE COST OF THE INSTITUTES.

Forty-six States in 1908 report the total cost of their institutes at \$297,356.89, an increase of \$35,507.21. The larger number of sessions held in 1908, however, reduces the cost per session from \$27.93 in 1907 to \$19.91 in 1908.

COLLEGE AND EXPERIMENT STATION AID.

There has been an increase during the year in the number of college and experiment station lecturers engaged in institute work. Fortyone States report the number of college and station lecturers at 426, an increase over 1907 of 40. The total number of days contributed by the colleges and stations in 1908 was 3,851, an increase of 295 over 1907.

SPECIAL INSTITUTES.

Sixteen States are reported as having held independent institutes. The total number of sessions is given at 142 and the attendance at 81,845. Eleven States report round-up institutes consisting of 99 sessions with an attendance of 28,910. Eight States conducted railroad specials. The attendance at 7 of these was 218,710. Ten States

held movable schools of agriculture, with an attendance of 6,849; and two States held field meetings continuing through nine days, attended by 4,100 persons, making the total attendance upon these five forms of activity 340,414, which, added to 2,098,268, the attendance at the regular institutes, will make a total of 2,438,682. In addition to this number there was the attendance upon the following forms of institutes, for which no record of attendance is given: Women's institutes in 15 States, 732 meetings; boys' institutes in 5 States, 174 meetings; normal institutes in 5 States; street fairs in 1 State; and a large number of farmers' picnics, addressed by farmers' institute lecturers.

IMPROVED METHODS.

In a number of States the institute authorities have departed from the beaten track which the institutes have been pursuing during their past history and have undertaken to supplement the work by giving more specific and extended instruction than was possible under the form of institute that was formerly in use.

In Arizona the director of institutes conducted meetings during eight weeks, holding the sessions at night and mingling with the farmers in demonstration and advisory work during the day. At one point during the term of the institutes he taught three classes in agriculture in the local academy during the day and held institute meetings at night. During the institute season the lecture force returned to each locality every two weeks for institute meetings, and there were also organized in each of these localities permanent institute societies.

In Mississippi, the farmers' institute, by action of the board of trustees of the agricultural college, has been made a department of the college, and additional force has been secured to assist in carrying on the work.

In Maryland, the institute department, which is under the control of the Maryland Agricultural College, purchased a private car with Pullman equipment, which was used for short-course work in institute schools. Students in various localities throughout the State were registered in advance and formed into classes, agreeing to attend all of the sessions of the course to be held in their several localities. The course consisted of six lectures upon leading agricultural subjects. During the intervals between lectures, farms, orchards, stables, and poultry yards were visited and inspected and expert advice given respecting their treatment. Visitors to the car were also met and the practical character of the exhibits explained. The schools were continued for one month on the line of the Maryland and Pennsylvania Railroad, having a total registered attendance of 1,714.

In the State of Washington 3 traveling dairy schools were equipped and sent out, each remaining in a locality five days; and

8 street fairs were held at various points, to which farmers brought stock, grain, and various other kinds of produce for sale.

In Colorado, 12 farmers' short courses and 3 domestic-science short courses were held in as many different sections of the State. From 9 to 14 lecturers were sent to each farmers' short course and 4 lecturers to each domestic-science short course. To secure a farmers' short course 100 farmers were required to agree to attend and each pay a tuition fee of \$2. For a domestic-science course 50 women had to agree to attend at a tuition fee of \$1. The total enrollment in the farmers' short courses was 1,101, and in the domestic-science short courses 1,034. The success of the movement is so pronounced that the director is planning to extend the work and hold during the coming season 24 farmers' short courses and 10 short courses in domestic science.

COLLEGE-EXTENSION WORK.

A most encouraging fact connected with the dissemination of agricultural information among rural people is the interest that is taken in this movement by the agricultural colleges and experiment stations. New York, Maine, Pennsylvania, Ohio, Indiana, West Virginia, Colorado, California, Illinois, Nebraska, Iowa, Kansas, Rhode Island, Utah, and Wisconsin have all organized for extension work.

Perhaps the best-equipped effort in the direction of carrying agricultural information to farmers by the agricultural colleges has been in operation in the State of Iowa. A corps of 10 expert lecturers, organized and sent out by the State Agricultural College, has been engaged in giving instruction to classes of farmers, remaining a week in a locality. Those who attend the meetings are divided into sections or groups corresponding with the main features of the agriculture of the community. A distinct course of instruction is provided for each group—one upon corn judging, another upon stock rearing and judging, another on domestic science, etc. The attendance upon these courses and the interest in the instruction given have been very satisfactory—so much so that the college feels justified not only in continuing the work, but it expects to greatly enlarge it during the coming year. With this in view, schemes of instruction have been prepared outlining and systematizing the courses, rendering them more practical and complete.

THE AMERICAN ASSOCIATION OF FARMERS' INSTITUTE WORKERS.

The annual convention of the American Association of Farmers' Institute Workers in Washington, D. C., November 16-17, 1908, was the best attended of any previously held. Two hundred and fifty-seven persons registered, representing 42 States, 1 Territory, and

3 provinces of Canada, besides one visitor each from New Zealand and the Transvaal.

The subjects for discussion in the general programme were mainly directed toward defining the status of the farmers' institute in its relation to other forms of agricultural education. The points brought out were that the farmers' institute occupies the position of field agent for agricultural education; that it provides a most efficient channel for carrying agricultural information directly to the farmer who is unable to leave his occupation to go to school; and that it should broaden its work until it embraces other more advanced forms of educational work and extend its efforts until all rural people have full opportunity to enjoy its benefits.

The reports from the Canadian provinces of Alberta, Quebec, Saskatchewan, and Ontario showed that they had held 7,266 half-day sessions of institutes, with an attendance of 321,963. A remarkable development of institutes for women in Canada was shown by the report from the Province of Ontario, where 3,978 sessions for women

were held, with an attendance of 93,951.

WORK OF THE OFFICE.

During the year the Farmers' Institute Specialist visited and delivered lectures in institute conventions in 8 States—Indiana, Kentucky, Maine, Michigan, New York, Pennsylvania, South Carolina, and Virginia. He also visited MacDonald College, in the Province of Quebec, Canada, and the Scranton Correspondence School, in Pennsylvania, for the study of their methods in agricultural education extension work.

In addition to conducting the correspondence of the Office, there were prepared for the printer Bulletin 199, Report of the Proceedings of the Twelfth Annual Meeting of the American Association of Farmers' Institute Workers, the Annual Report of the Farmers' Institute Specialist for 1907, and a revised list of the State Directors of Farmers' Institutes and Farmers' Institute Lecturers of the United States. He assisted in editing a Syllabus of an Illustrated Lecture upon Tobacco Growing; also Bulletin No. 200, Course in Cereal Foods and Their Preparation for Movable Schools of Agriculture.

A syllabus of a lecture upon Selecting Beef Cattle was prepared for the Office during the year by Prof. Frederick B. Mumford, of the University of Missouri. The syllabus is accompanied by 15 charts, from which two sets of bromide enlargements have been made for use by farmers' institute lecturers. There has also been prepared a Syllabus of an Illustrated Lecture upon Poultry Rearing by Prof. James W. Dryden, of the Oregon State Agricultural College. Three courses of study for use by movable schools of agriculture are in preparation, as well as several illustrated lectures.

INSTITUTE DEVELOPMENT.

When the institutes began twenty-five years ago the agricultural colleges in this country were new, and their purpose was little understood. They had almost no alumni to represent them, and the few that had been sent out were too fresh from school to advertise agricultural education effectively or to exemplify the value of the colleges as aids in agricultural development. The great body of farming people at that time were either total disbelievers in the practical value of "book learning" for a farmer, or were prejudiced against the new education by the older institutions against whose standards the new colleges were a protest, and whose time-honored maxim, "culture for culture's sake," was in danger of being revised by the land-grant colleges to read, "education for service."

At this point the farmers' institute appeared and began its work as the advocate of the use of better methods in the practical operations of the farm. It became, at the same time, an agency through which the agricultural colleges and the experiment station workers were able to meet farming people face to face, and were thus afforded opportunity to explain the aims of these institutions and show some of the practical results of their work. Since that time the experiment stations have become most important instrumentalities for the advancement of agriculture, and the land-grant colleges have developed into great institutions that have revolutionized the whole system of education in this country, giving instruction along industrial lines to thousands of young men and women each year.

During this period the farmers' institute also grew in public appreciation and importance until now institutes are organized in all of the States, and through them there were reached last year over 2,000,000 people. The force of teachers in the employ of the State directors now numbers over 1,100, and the amount of money annually

expended in carrying on the work approximates \$300,000.

Notwithstanding the great work that the institutes have accomplished, and their wide popularity, it has been evident for some time that as at present conducted the institute does not and can not supply information sufficient to equip farmers for the successful pursuit of their profession. A forty or sixty minute talk on dairying once or twice a year—which is about as much as the ordinary institute provides—while valuable as far as it goes, will not fit a farmer for the practice of the best methods in conducting a dairy farm. About all that such a lecture can accomplish is to excite interest in the subject. The work of giving instruction sufficient to equip for efficiency in conducting the operations of agriculture is a much more extended matter.

THE UNGRADED COURSE.

The method of giving instruction in common use in the farmers' institutes by lecturing to promiscuous audiences into which are admitted persons of every age, from the most youthful to those of forty or fifty years, and those of most elementary acquirements to others of high-school, normal-school and even college grade, is no longer adapted to the changes that have taken place in rural communities since the institutes began.

During the early stages of the work, when the main purpose was to advertise and exploit agricultural education, the disregarding of age and intellectual qualifications in the hearers was not a serious matter and, indeed, the advertising was probably as effective under this single class organization as any that could have been devised. But now that the work of educational exploitation has in most of the States been accomplished, the time seems to have come when the different degrees of intellectual advancement and practical skill of country people should be recognized, and provision be made for adapting the teaching to the various ages, experience, and degrees of attainment of those whom the institute is undertaking to instruct. In other words, the institute should now become what is in effect a graded school of agriculture, having a primary or elementary section for boys and girls, another section for scholars somewhat more advanced, and another for those of mature years who have had experience in agriculture and considerable intellectual training in the schools. If some such arrangement is not made, scholars of the higher grades can justly complain that the institutes have stopped short of meeting their needs; that they are continuing to devote their main efforts to advertising and exploiting an education whose main characteristics and usefulness are now well known, and are neglecting to provide the amount of technical instruction in agriculture that their scholars need and are prepared to receive. The question now to be decided is, Shall the institute continue to confine itself to teaching the one-class promiscuous school, and turn over the instruction of those who are no longer interested to some other institution or organization that will recognize their more advanced and special needs and will undertake to supply them? There are now in every community persons engaged in agriculture who would be glad to receive instruction of advanced grade, and although these more advanced students are at present in the minority, yet if classes were organized and instruction provided adapted to their needs, their number would undoubtedly rapidly increase and they and the communities in which they reside would be benefited far beyond what will be possible under the system now in use. These persons are already convinced of the

value of agricultural science, and now wish to take up the more advanced study of this science or the various sciences which compose it, and learn how to apply them in their practice. In short, so far as these persons are concerned, the preliminary and preparatory work of the institute has been accomplished. They now need extended, exact, and advanced teaching in order to make them more efficient as farmers and to provide for their future needs. They have graduated from the old form of institute instruction and are ready for the more advanced grades.

This raises several important questions. Among them are: What is there in the extension field of agriculture that might be undertaken by the institute with advantage to such people? What form of organization shall the institute take in order to supply this new demand, and what shall be the method and extent of the teaching? These questions should have immediate attention if the institute is to properly fulfill its mission as a teacher, adviser, and demonstrator of agricultural truth to the masses.

THE MOVABLE SCHOOL

It is altogether probable that no single instrumentality or organization can be devised that will in all respects meet the need of agricultural people in an educational way. Several agencies no doubt will have to cooperate in bringing about the complete system of agricultural instruction that is to fully meet the needs of farming people.

Among these agencies, and probably the one next in order in the line of agricultural education extension in this country, is the movable school of agriculture. This is the logical outgrowth of the farmers' institute—a development of the institute idea. It is itinerant in character and deals with people who are so situated as to be unable to go from home to school. While it is true that this new feature in education is founded on the institute idea, it is not in consequence of that an "institute." On the contrary, it is a "school," in that it adopts the "school method" in giving instruction. The school method consists: (1) in organized classes; (2) systematic courses of instruction; (3) individual study; (4) skilled instructors; and, (5) stated examinations. It is this systematized method of work applied to agricultural instruction and carried out into the country to classes of farmers organized for study that is meant by the movable school.

The school is unique also in that instruction is given in but a single subject, and its scholars are limited to adults who have had at least common school training and at least a year's experience in the line of farming which the school represents. The length of school term may vary from one week to two or three months, according to the nature of the subject taught. The equipment consists of apparatus sufficient

to furnish each pupil with a complete set for laboratory use; a library with duplicate copies of books for reading and reference; and also a collection of illustrative material for demonstration and practice work. The teaching is by lectures, and the number is limited to one lecture each day. A syllabus of the lecture containing references to authorities on the different points presented is furnished to each student at its close. The lecture is then followed by the looking up of references noted in the syllabus, and later by practice work in the laboratory, in the stable, garden, or field.

The classes are composed of registered students who have agreed to take the entire course and are limited in number of pupils to not less than eight nor more than fifteen in any one class. A small fee is charged to each student, and the locality is expected to provide a room equipped with desks, chairs, heat, light, and water, in which to hold the school, also janitor service, and material for laboratory use, free of expense to those sending out the school. The purpose is to reach and develop the talent of a few selected people in each community by teaching them with considerable degree of thoroughness how to improve their own practice and thereby also become a help to others.

THE COUNTY SECRETARY.

Before the movable school can be operated most effectively there must be some form of local organization to select the students, organize the classes, and assume general oversight of the work.

A competent superintendent or secretary of agriculture in each county whose duty shall be to give his entire attention to the interests of the farmers of that county is most important, and is becoming more so each year as work in agricultural education develops. The value of an expert on the ground who is familiar with the conditions that exist in the county can hardly be overestimated. The old form of voluntary and uncompensated service is no longer adequate for meeting the more extended and specific duties that advanced agriculture requires. A paid expert capable of advising farmers with regard to the improvement of their methods is now a necessity in many counties, and soon will be in all. If the expert is discreet and capable, the farmers will soon come to recognize the fact and be ready to consult him freely, accept his suggestions, and as rapidly as possible incorporate them into their practice.

In some countries this kind of service is so highly regarded that as many as six expert agriculturists are employed in a single county, who give their entire time to lecturing and advising farmers, and to conducting demonstration fields illustrating the value of the methods that they recommend. Under this system there is no time when the local interests of the agriculturists of the county are not being studied by a competent expert or set of experts; and orchardists,

market gardeners, dairymen, cattle feeders and breeders, special and general farmers, have at hand at all times, free of cost, a corps of competent advisers whom they may consult as occasion requires.

THE WINTER AGRICULTURAL HIGH SCHOOL.

If agricultural education in the United States is to be thoroughly organized so as to provide instruction for all of the people, the time must come when agriculture in some form must be taught in the rural public schools. But when that time does come it will not supply the kind of expert assistance that the adult farmer specially needs. The work will of necessity be quite elementary and must ever remain comparatively simple and very general in its application.

There will, therefore, always be the need for schools of advanced grade for teaching adult farmers and preparing them for the more successful pursuit of their business. In other words, itinerant work in agriculture should not be dismissed from service until high schools for adult farmers are established in sufficient numbers to accommodate all who wish to receive more advanced instruction than that

which the rural public schools afford.

The agriculture of Denmark is perhaps the most advanced of that of any country in the world. This position has been attained in the past forty years and is to be attributed more, perhaps, to the winter high schools for men and the summer high schools for women than to any other, or than to all other agencies combined. Admission to these schools is limited to persons over 18 years of age who have had experience in practical farming extending over at least one year. The five winter months are devoted to the teaching of men, and the three spring and summer months to giving instruction to women. Although Denmark is a country with a population of only two and one-half millions, and an area of about the size of Maryland and Connecticut combined, there are seventy-eight of these schools in operation, with an attendance of about 6,000 students. The schools are not devoted to the study of agriculture exclusively, but teach other branches of learning as well, with special attention given to the history and literature of Denmark, with a view to thereby stimulating the national spirit while improving the efficiency of the farmers in the various operations of agriculture. Out of the education given. and from the inspiration which these schools have imparted, there has grown up the wonderful system of cooperation by agricultural people that is unsurpassed for efficiency anywhere in the world:

A similar system is in operation in Sweden, introduced from Denmark, and is effecting equally satisfactory improvement among her rural people. In 1903 there were in that country 872 of these people's high schools for men and 636 for women.

With these successful examples before the educators of our own country, they would be failing in their duty to farming people if they did not at once make careful inquiry into the operation of these schools and ascertain whether such schools can not either in whole or in part be introduced into our system of education in the United States.

THE FARM CLUB.

There will never be the improvement in rural conditions in this country that is desired until there is first developed in the minds of the individual citizen in each community a sense of personal responsibility for such improvement. This can not be done by any system that does not recognize farm life in its social as well as in its economic aspects and relations; that does not provide in each community some fixed organization into which the better class of citizenship will come and around which the neighborhood life can be rallied in a social way for general improvement as well as for pecuniary advantages. So long as the farmers' institute is an agency operating from the outside, coming into a community and then going again, it will be largely only a temporary excitant, with but little of steadily persistent influence left to operate after it has gone. It must live in the community year after year as an active, intelligent agency in daily contact with the people whom it is to benefit. It must become a part of the community life, leading the way in all that relates to community betterment, as in roads, schools, churches, country-home improvement, and better farming. This can not be done by the organization of a single society for a county, but must be accomplished, if at all, through the community club.

Experience has shown that the average citizen will not, week after week and month after month, travel 10, 15, or 20 miles to attend meetings of farmers, however advantageous they may be, but is glad to be a member of a local club or society that includes his neighbors, if it proves useful and is within easy reach. It has been demonstrated also that the club that includes the entire family is far more efficient than where the members of the family are divided. Whatever advantage the separate club affords can be secured in the family club by having a men's section, a women's section, and a boys and girls' section, all

held at the same time and place.

Clubs of this character not only promote the social side of country life and develop individual character, but they also provide centers in each community through which the agricultural people of the section can be promptly and directly reached with important information, and they can also be utilized in the education of their members in the best farm practice and for cooperation in carrying on much of the business of the community.

The Province of Quebec in Canada furnishes an example of the practical working of farm clubs when organized and encouraged by the State. The clubs in that province are incorporated, and have power to acquire and purchase lands for the purpose of holding exhibitions, for establishing agricultural schools or model farms, and may sell, lease, or otherwise dispose of them, but can not own more than 200 acres at a time. The clubs may own animals of improved breed, and keep such animals for service in the territorial district which the club occupies upon such conditions as the club may determine. They are "empowered to promote and favor experiments in farming, manuring, and improved agricultural machinery and implements; encourage the study of the best methods of fattening cattle, the production of milk, the manufacture of butter or cheese, and the improving and draining of lands."

The amount of annual subscription or dues of each member is \$1. In 1907–8 there were 624 of these clubs in operation in the Province of Quebec, with a membership of 58,310. The receipts from the members were \$113,572.40, and from the general government by way of grants in encouragement of agriculture, \$26,644. Most of the clubs own standard breeds of stock. They bought high-bred animals in 1907 to the value of \$17,590, and paid out \$105,795 for improved seeds and fertilizers.

The principle involved in the club idea is that the many know more than the few, and that the many can do more than the few if they are organized for the work. The combined experience of a community expressed in the social meeting and worked out in a practical way upon one or more of the neighborhood farms starts many to thinking and acting who otherwise would have been content to have followed routine methods. Much of the lack of progress in the agricultural industry has been due to the isolated life that farmers lead, which has shut them off from personal contact with the more progressive and successful men of their own profession as well as from intercourse with wide-awake and advanced thinkers in other occupations. A well-organized farmers' club properly conducted soon interests the whole community in the general welfare and relieves the monotony of the old isolated farm life by introducing interesting and profitable pleasures among the people in the form of social entertainment and intelligent discussions.

The formation of farmers and their families into clubs for mutual improvement and business advantage is possible in every community, and experience has proved that the members of such associations are progressing in social refinement and in intellectual and business capacity far beyond their neighbors who have not availed themselves of such advantages. The farmers' institute is in position to take up this work. It is a legitimate part of its mission, and there is no other

agency to which the work can be committed that stands so high in public confidence or that has the force of men and the amount of financial and governmental support at command necessary for conducting it.

THE DEMONSTRATION FIELD.

The chief difficulty heretofore in convincing farmers of the value of methods differing radically from their own has been their distrust of the qualifications of the person recommending the change. If, however, the lecturer demonstrates his theory by actually obtaining the results predicted, and does it in the neighborhood in which those whom he wishes to convince reside, he has not only established the truth of the particular method advised, but has gained in addition the confidence and respect of the practical men and women of that community who are then prepared to accept other recommendations which he may make with faith in their ultimate success.

There can be no more conclusive proof of the value of a method than the results worked out successfully in the presence of those who are incredulous. A demonstration plat in a neighborhood which shows a marked increase in production over the customary methods of the community is an argument that can not be gainsaid.

The demonstration field and the feeding experiment do two things: They introduce, first of all, better methods, and, second, they put the people of a community into a teachable frame of mind to receive other truth not so readily demonstrable. Demonstration is a language that all can understand, and an argument which few can resist, especially if the methods are simple, such as the ordinary farmer can employ. More and more this form of teaching agriculture is being employed both in the higher institutions of learning as well as in the primary school and kindergarten, and wherever it is introduced there as an immediate improvement and increased interest on the part of those receiving the instruction.

In a recent report of a departmental committee on the subject of agricultural education in England and Wales covering 645 imperial octavo pages, and recording the testimony of 113 expert witnesses, the following statement is made in the conclusions of the committee:

It was frequently stated by those giving evidence that farmers take more interest in experiments than in any other class of work undertaken by the colleges, and the committee agree that the teacher has no better means of getting into close touch with the farmer than by laying out for his inspection a series of experimental plats designed to elucidate some local questions.

The farmers' institute should call special attention to this most effective method of teaching agriculture, and in favored localities should go further and organize and conduct demonstration work of this character. Here is a field of effort of great possibilities almost unoccupied and very much needing development.

THE COUNTY STOCK BARN AND SEED FARM.

Another most important department of agriculture needing attention is the live-stock interest of the country. The difficulty that confronts farmers in many districts who wish to improve their stock is that of securing the services of well-bred sires. The country is full of cheap scrub horses, cattle, sheep, swine, and poultry. They are scrub because they have sprung from scrub sires. There can be no improvement in the stock of a community until well-bred sires are introduced and their services are available at rates low enough to be within easy reach of the farmer of moderate means.

Perhaps the most effective way of improving the stock of a country is by means of central stock barns where animals of approved breeds are kept for service. One such establishment in a county would be sufficient to create an interest in better stock throughout that county and would be a center from which breeding animals of standard quality could be distributed. If a portion of the original cost of the stock in such an establishment were advanced by the State, as is done in some foreign countries where stock breeding is successfully conducted, the balance could be contributed by the agricultural society of the county and the agricultural clubs.

The same difficulty that has interfered with the improvement of live stock exists in regard to procuring seeds adapted to local conditions. If a test farm were established in every county, the introduction of improved varieties of seeds and of suitable varieties of root, soiling, and fruit crops would become a comparatively simple matter. The tests would be made under local conditions and the results, if successful, would be accepted as justifying the farmers of the county in incurring the expense necessary to introduce the improved variety upon their farms.

FUTURE EXPANSION.

The fact that these extension methods are in the line of future progress makes it necessary that some agency shall take them up in a broad and effective way at once.

The time seems to have come for expanding the farmers' institute to include other forms of extension work than those heretofore embraced—for undertaking one or more of the following activities in addition to those already in operation: Organizing and sending out movable schools of agriculture; locating in each county a paid secretary of agriculture, who shall be an expert in agricultural science and practice; employing itinerant expert advisers to be stationed in each county; establishing demonstration plats and fields for exhibiting the results of the use of improved seeds, fertilizers, and methods of culture; organizing winter high schools of agriculture for adults;

organizing community farm clubs for social and business purposes; starting county stock barns in connection with the county agricultural societies; and seed farms for testing varieties of seeds, vegetables, and fruit trees in their adaptation to local conditions, and for distributing improved varieties among farmers.

The farmers' institute has undoubtedly been the chief instrument in the past in creating an interest in the present forms of agricultural education and methods for rural improvement. It should now equip itself for extending its usefulness to include advertising, organizing, and conducting these new and more advanced forms of itinerant instruction work.

Much of the work of this Office, in assisting in this work, should be in the direction of devising methods suited to extension conditions and to securing the cooperation of State and local educators in introducing them into their courses of instruction and into the everyday practices of the people. A large amount of money could annually be most advantageously applied to formulating courses of study and devising new methods of illustration suited to extension work and to demonstrating their value and adaptability to the various conditions peculiar to the several States.

It is both gratifying and encouraging to see the change of attitude that has occurred in recent years respecting the practicability of organizing and conducting in an effective way a system of agricultural education extension work. All educators, or almost all, are now thoroughly convinced on these points. As soon as, therefore, they can be brought to realize as well their individual responsibility for undertaking and carrying on this work, vigorous efforts in that direction will begin, and agriculture in this country will at once respond to the intelligent tillage which these efforts will secure, and our ability to supply all possible future demands for food for National support will be assured.

STATE REPORTS.

Numerous items of interest in the reports of the State directors are incapable of tabulation or are peculiar to a particular State, and at the same time are important to a complete record and understanding of the progress of the institute work as it develops each year. In order that the great body of institute workers may be familiar with this progress, the principal points are incorporated in the following narratives under the respective names of the States and Territories:

ALABAMA.

Institute director.—C. A. Cary, professor of veterinary science, Alabama Polytechnic Institute, Auburn.

During the year 51 sessions of institutes were held, with a total attendance of 8,244. There was also the annual summer school for

farmers continuing through 20 sessions, with an attendance of 507 persons. The leading topic assigned for discussion at the various institutes was along the line of the improvement of the live-stock industry with special reference to cattle-tick eradication. There was appropriated for institute work \$600, not including the salary and expenses of the State director amounting to \$400. The agricultural experiment station furnished 7 lecturers who devoted from twenty to thirty days each to giving instruction in the institutes.

Tuskegee Institute for colored people held meetings at the institution continuing for twelve days, with an average attendance of 50 persons. The expenses of these meetings are borne by the institution. The institute also sends out a traveling school of agriculture which goes to the plantations and gives instruction to the farmers, and also conducts demonstration work in illustration of the teaching. A conference agent is employed whose business is to go over the State and stir up interest among the colored people in agricultural education. The institute meetings are advertised by means of posters, postal-card notices, and by house-to-house visitation.

ALASKA.

Institute director.—C. C. Georgeson, special agent in charge of agricultural experiment stations, Sitka.

Farmers' institutes have not been held in Alaska, chiefly owing to the fact that the districts adapted to farming are widely separated and sparsely settled. Work of this character for the present is conducted by the special agent in charge of the agricultural experiment station at Sitka by correspondence and as he visits the various sections in the interest of his experiment and demonstration work.

ARIZONA.

Institute director.—R. W. Clothier, superintendent of farmers' institutes, Tucson.

During the past year 56 institutes were held, consisting of 56 sessions, with a total attendance of 2,673, at a cost of \$1,745, which includes the salary of the superintendent. In addition to the regular institutes, a short course in agriculture was held at Thatcher, in which a lecture every day was delivered upon each of three branches of agriculture, and continued through a term of eight weeks. The total attendance was 111. The teaching was by the institute superintendent, assisted by three members of the experiment station staff. The expenses were borne by the experiment station out of the appropriation which provides for the expenses of the establishment of farmers' institutes and short courses of instruction throughout the Territory.

A feature of the institute work peculiar to Arizona is that of holding all of the institute meetings at night, and during the day the members of the institute force lecture in the neighborhood schools. In one instance the institute superintendent taught three classes in agriculture in a local academy regularly for a period of eight weeks. Each locality in which institutes were appointed was visited every two weeks and institute meetings held. Although 56 meetings were held at different times, the appointments were for only 22 different places.

ARKANSAS.

Institute director.—C. F. Adams, acting director agricultural experiment station, Fayetteville.

There were 56 institutes held in Arkansas during the past year. Fifty of these were one-day institutes, 4 were two-day, and 2 were three-day. The entire number of sessions was 64, and the attendance 5.596. The amount appropriated for institute expenses by the State was \$1,500, of which \$1,199.40 was expended. The instruction was given by members of the State agricultural college faculty and agricultural experiment station staff, who contributed fifty-six days of service. The director of the experiment station fixes the dates and places at which institutes are to be held. The principal subjects discussed were dairying, animal husbandry, and horticulture. There have been no county organizations in the State for holding institutes, and it has therefore been necessary for the State director to personally organize the meetings, and see that suitable arrangements are made for holding them. During the past year the director has organized a number of institute associations, and it is proposed to extend the organizations so as to cover all of the counties of the State.

CALIFORNIA.

Institute director.—W. T. Clarke, superintendent of farmers' institutes, Berkeley.

Institutes were held in California in 28 out of the 57 counties. The entire number of sessions was 294 and the attendance was 27,912. The State appropriated \$6,000, and \$2,000 additional was appropriated from the funds of the University of California for carrying on the work. There were 10 speakers on the State lecture force who contributed 100 days of service. There were 2 special institutes held; one at the university farm at Davis, and a general institute at the pathological laboratory at Whittier. These two meetings aggregated an attendance of 2,613. The interest taken in this State in this form of university extension in agriculture is daily becoming greater. At

the outset it was found necessary to solicit communities to receive the institutes. At the present time the demand is much greater than the means at the command of the university will enable it to meet.

Special stress has been laid upon the single-purpose institute continuing the meetings from two to six sessions, all of the sessions being devoted exclusively to one particular subject, treating it from various points of view. A number of viticultural institutes were held during the year which were of this character, and at which the subjects were discussed by authorities who likewise gave demonstrations in the vineyard—pruning the vines and performing such other operations as might affect the future crop. Poultry institutes were also held in which the subject of poultry rearing was discussed in its various phases by experts upon this subject. Creamery practice, sanitary milk production, horticulture in its various aspects, and cereal culture all received attention at institutes specially devoted to these particular topics. It is believed by the institute director that more good is done by institutes specially devoted to one topic than by those that are loaded down with half a dozen different subjects, with no special stress laid upon any one of them.

A demonstration train was equipped and sent out, consisting of 3 exhibition cars, 1 devoted to insect pests and the others to illustrative material, relating to cereal culture, sanitary milk production, veterinary science, plant pathology, viticulture, general horticulture, and the growth of hard-wood timber, special stress being laid upon the eucalypts. The train was accompanied by from 2 to 6 men from the college of agriculture acting as demonstrators. The stops varied from two to six hours.

COLORADO.

Institute director.—H. M. Cottrell, director of farmers' institutes, Fort Collins.

The most important movement in institute development during the year has been in conducting short courses continuing for one week in a locality. Twelve of these short courses for farmers and 5 domestic science short courses for women were held in as many different sections of the State. From 9 to 14 lecturers were sent to each farmers' short course, and 4 lecturers to each domestic science short course. In order to secure a farmers' short course 100 farmers had to agree to attend all of the sessions, and each was required to pay a tuition fee of \$2. For a domestic science short course 50 women had to agree to attend and each pay a tuition fee of \$1. The total enrollment for the 12 farmers' short courses was 1,401, and for the 5 domestic science short courses 1,034. The institute director is planning to hold 24 farmers' short courses and 10 domestic science short courses during the coming winter (1908–9). The expense of conducting institutes

during the year amounted to \$7,724.46. Of this the State appropriated \$5,000; fees were received from short-course students to the amount of \$2,164; and the balance was from the State appropriation carried over from the previous year. Two railroad special train institutes were conducted, one as a feeder's special and the other as a potato special. These trains were run over 1,768 miles of territory and held 43 meetings, with a total attendance of 6,710.

CONNECTICUT.

Institute directors.—James F. Brown, secretary State board of agriculture, North Stonington; J. G. Schwink, jr., secretary Connecticut Dairymen's Association, Meriden; H. C. C. Miles, secretary Connecticut Pomological Society, Milford.

During the past year the three organizations responsible for farmers' institute work in Connecticut combined for conducting all of the institutes by appointing a board of managers composed of representatives from the board of agriculture, the dairymen's association, and the pomological society. This board planned the work of the year and assigned the various meetings to the different societies. Heretofore there has been little, if any, cooperation between these organizations in their institute work.

Under this arrangement the State dairymen's association held 20 institutes, composed of 43 sessions with a total attendance of 3,700, at an expense of \$700. An annual convention of dairymen met in January, continuing through two days. Four field meetings were held by the association, one at the agricultural college and the other three by invitations of proprietors of dairy farms in different sections of the State. At these field meetings demonstrations and lectures were given and practical methods in the scoring of dairy products and in judging dairy herds were shown. These meetings were well attended, the number at each ranging from 200 to 600.

The pomological society held 5 one-day institutes, consisting of 2 sessions each. There were also 3 field meetings, with an estimated attendance of 1,100. At these field meetings, which are held in the summer months, practical demonstrations in orchard and small-fruit culture are given. The superintendent reports that they have found them fully as instructive and profitable as any of the winter institutes and are also as well attended. Four members of the agricultural college faculty and three from the agricultural experiment station contributed thirty-five days of service in giving instruction at the institute meetings. These speakers received no compensation except that their expenses were paid. The entire cost of the institutes last year amounted to \$125.

DELAWARE.

Institute director.—Wesley Webb, corresponding secretary State board of agriculture, Dover.

There were held during the year 14 one-day institutes and 5 of two days, the whole composed of 52 sessions, with a total attendance of 3,905. The cost of the institutes was \$725. The experiment station furnished five lecturers who contributed forty days of service. The principal topic discussed during the season was corn growing and breeding. Almost all of the instruction given was by members of the staff of the agricultural experiment station and by representatives from the United States Department of Agriculture. A field meeting of farmers held in June at the Delaware Agricultural College was attended by about 400 persons with very satisfactory results.

FLORIDA.

Institute director.—P. H. Rolfs, director of the agricultural experiment station, Gainesville.

Institute work was resumed in Florida under the direction of the agricultural experiment station. During the year 26 institutes consisting of 40 sessions were held, with an attendance of 3,316 and at an expense of about \$2,400. In arranging for institutes, preference was given to counties where none had previously been held. The appropriation for institute work next year is \$3,000. The dates, places, and programmes for the institutes are arranged by the superintendent in cooperation with local committees.

GEORGIA.

Institute director.—A. M. Soule, president agricultural college, Athens.

During the year the institute work was transferred to the direct management of the State college of agriculture and was conducted by members of the faculty of the college, assisted by three officials connected with the agricultural experiment station. A distinguishing feature of the work was the operation of an "education train." This train was out continuously for thirty-five days, made 150 stops, and the total attendance upon the lectures was approximately 150,000 persons. School children were invited to many of the meetings and attended in large numbers. In several instances the teachers required their scholars later to write essays relative to the exhibits carried on the train. A large amount of agricultural literature was distributed and addresses were made at the various stops. A wholesome sentiment was created throughout the State in favor of agricultural education, and the attention of the people was specially directed to the institutions where they could obtain information that would be

helpful. By means of this train all sections of the State were visited by the lecture force, and much information was collected respecting the local needs of farming people in the several districts.

The total number of institute sessions held during the year was 84, and the attendance at these regular institutes was approximately 10,000. There were also a number of picnics and harvest-home meetings held under the auspices of the farmers' institute force. The total cost of the institutes, exclusive of the train service, was about \$4,000. No normal or round-up institutes were held during the year, but provision will be made for these during the coming season.

HAWAII.

Institute director.—William Weinrich, jr., secretary and treasurer farmers' institutes, Honolulu.

There were four farmers' institute meetings held in Hawaii, all of them at Honolulu, with a total attendance of about 150, and at a cost of \$72.60. The difficulty experienced in institute work in Hawaii is that the meetings, owing to lack of funds for institute purposes, have been held in Honolulu, which is not the center of the small farming interests. Most of the small farming is done on the other islands, and it has not been practicable to send lecturers to these islands because of the insufficiency of funds for the purpose. The last meeting was held June 20 in Honolulu, and was attended by about 15 people. The most of these, however, were men having large interests in agriculture, and therefore represented a considerable territory, notwithstanding the small number present.

IDAHO.

Institute director.—H. T. French, director agricultural experiment station, Moscow.

Three county institute societies have now been organized in the State of Idaho, and there are a number of other local organizations which it is believed will develop into county associations. More time is being given to a single institute than formerly, the sessions being extended throughout a week or ten days. These long institutes are held in central locations, and are found to accomplish more, at least at the present stage of the work, than was possible at the shorter sessions. Twelve institutes were held during the year. Three of these continued through the long period. The total attendance at all of the sessions was 5,650 and the cost was \$774.90. The institute lecture force is composed chiefly of professors from the agricultural college and members of the State experiment station staff. Four independent institutes were held with an estimated attendance of 500, and one railroad special was run over the Idaho branches of the

Northern Pacific, continuing through three days. About 2,000 people were met and over 8,000 copies of agricultural bulletins and pamphlets were distributed. Two women's institutes were held in connection with the regular institutes, with an attendance of from 60 to 125 women each day. The chief difficulty in the way of extending the work in Idaho is the lack of qualified speakers, the professors in the agricultural college and the members of the experiment station staff being fully occupied with their work at the college and station, and can scarcely be spared for exterior work, particularly since the distance to be traveled from the college to the lecture fields is so far that the time consumed in actual travel is greater than that occupied in lecturing at the institutes. There is need for a special force of institute workers to devote their entire attention, at least during the winter months, to giving instruction to farmers at their homes, and until such a force can be secured the number of institutes possible to be held will be quite limited.

ILLINOIS.

Institute director.—F. H. Hall, superintendent of farmers' institutes, Aurora.

Institutes were held during the past year in a larger number of places than ever before. In one county there were eight days of institutes in 3 towns; in another, six days in 4 towns. In each of several counties there were four days in 2 towns. The institute officers and the officers of the domestic science association have devoted considerable attention to encouraging young people to attend the two-weeks course in agriculture and the course in household science at the university. As a result of these efforts, the attendance at the short course last year was larger than in any previous year. Seventy-five of the 102 counties were represented and 552 students were enrolled.

In many instances institute speakers have been invited by county superintendents and city superintendents and teachers to address the high schools in the towns in which institutes have been held, and in other instances high-school pupils and their teachers have accepted the invitation to attend one or more sessions of the institutes. A county farmers' institute was held in the buildings of one of the State normal schools. This was, in fact, the district institute attended by prominent men and women from at least six counties and by prospective teachers from every county in northern Illinois. So great was the interest aroused in this institute that those in attendance voted unanimously to hold the next institute at the normal school, and as an outcome of the success of this meeting it has already been planned that there shall be a farmers' institute at each of the five State normal schools next year. In this manner it is hoped to bring about 2,000 prospective teachers and several hundred actual teachers into contact with the farmers' institute, and it is believed that the normal-school

farmers' institute will become an important and prominent factor in promoting and maintaining a sympathetic and helpful relation between the college of agriculture and experiment station on the one hand and the common schools on the other.

A press bureau was established through which there were prepared and sent out to upward of 500 newspapers, 62 articles. More than 200 of these papers published the matter sent out. These articles were for the most part reports of institute addresses and contained much important agricultural information. For the year ended June 30, 1908, 627 institute sessions were held with a reported attendance of 122,523. There were two hundred and sixty days of institutes. Two hundred and thirty-three of these were addressed by college and experiment station speakers, seventeen by speakers from the State entomologist's department, and one hundred and four by speakers from the State highway commission. The total expenditure for institute purposes, including the salaries of the superintendent and secretary, from appropriation to the State institute, appropriation to the counties, amounts received from county boards of supervisors, and amounts paid in by local subscribers, was \$30,097.99.

INDIANA.

Institute director.—W. C. Latta, superintendent of farmers' institutes, Lafayette.

The special features of the institute work for the past year were: (1) Women's sessions, of which 67 were reported from 32 counties of the State; a few of these were separate sessions. (2) Special sessions for boys and girls, 27 of which were reported from 20 counties; a number of these were corn sessions especially for boys. (3) Educational sessions, 30 of which were reported from 18 counties. At these sessions rural school improvement, industrial training, and agricultural education were discussed. (4) Special sessions for the discussion of soil, corn, melon, and tomato growing.

Dairy and live-stock topics were presented at meetings held in considerable numbers of counties. Instruction in domestic science had been a prominent feature of the institute work for the last four years, in which time all but seven of the counties of the State have been visited one or more times by specially trained domestic science instructors.

An effort was made to organize the boys and girls into school clubs in order that they might thus better prepare for the various tests to be held under the auspices of the farmers' institute association. Very little was accomplished, however, in the actual work of organizing the school clubs, but it is believed that a number of such clubs will be organized in the near future. An earnest effort on the part of the general committee in charge of the institutes and of the speakers assigned was made to introduce object lessons, demonstrations, and the results of practical experience in the discussion of the so-called practical subjects under consideration at the institutes. An effort was made with some degree of success to introduce the method of the schoolroom more fully into the institute work, and it is believed substantial progress was made in this direction. The total attendance at the institutes during the year was 195,912. Three hundred and twenty-one institutes were held, composed of 1,112 sessions. The cost of the institutes is estimated at about \$17,000. Thirty-seven independent institutes were held, and a conference continued through 6 sessions, and a normal institute of 10 sessions, with an attendance of about 130, were also held. Five lecturers for institute work were provided by the agricultural college and 4 by the agricultural experiment station.

IOWA.

Institute director.—J. C. Simpson, secretary State board of agriculture, Des Moines.

Farmers' institutes in Iowa are held independently of each other, there being no central board or institute director in control of the work. The law provides that any county may secure State aid not to exceed \$75 in any one year by holding two-day sessions of institutes with an attendance of at least 40 persons at each session. During the past year 75 two-day institutes were held with an approximate attendance of 75,000, and at a cost of \$7,954.98. Five of the professors from the State agricultural college assisted in county institutes as lecturers.

During the month of December there was held a State agricultural convention and corn show in the agricultural rooms at Des Moines, which was well attended.

KANSAS.

, Institute director.—J. H. Miller, superintendent of farmers' institutes, Manhattan.

The year's institute work opened and continued with more than ordinary interest, although the attendance at many places was not as large as for the previous year. The most marked feature, however, was the decided interest of the best farmers of each community. In earlier years the leading farmers regarded the institutes with some suspicion. Now they are recognizing these meetings as of great practical value for the advancement of the agriculture of the State. One hundred and seventy-six regular farmers' institutes were held with an attendance of 33,684. Eleven speakers were furnished by the college and experiment station, who gave a total of one hundred and

ninety days of service and made 588 addresses. The local speakers numbered 957. Nine summer meetings, picnics, and Chautauquas were held which were attended by college speakers, at which there were 5,650 hearers. On account of railroad legislation reducing rates, and consequent inability of railroads to furnish transportation for speakers, no educational trains were conducted this year. The number of new institutes organized was 35, which makes the total number of institutes in Kansas 192. The total attendance at the summer meetings and regular institutes was 41,334. The institute department was also represented at 31 teachers' institutes, and 9 county and district teachers' associations. The State farmers' institute held its second annual meeting at Manhattan during the Christmas vacation. There was an enrollment of 384 in attendance, 312 being boys, delegates from the boys' corn contests. The attendance at the State convention held at the college during that week aggregated over 1,000.

KENTUCKY.

Institute director.-M. C. Rankin, commissioner of agriculture, Frankfort.

At least one institute meeting was held in every county in the State during the year, the entire number being 132, composed of 514 sessions. at which there was a total attendance of 21,690. There was also a round-up institute consisting of 8 sessions, with an average attendance of 500 per session. Many new farmers' clubs have been organized during the year, and a large number of institutes were located in parts of the counties other than at county seats, where they had previously been held. An effort has been made to secure the organization of a farmers' club in every magisterial district in every county in the State. The State farmers' institute was held at Frankfort with the largest attendance and the greatest interest ever before shown at a State institute meeting. The State agricultural college and the agricultural experiment station contributed the services of five of their members for lecturing at the institutes. A report of the proceedings is published annually in an edition of 25,000 copies, which is distributed by mail and through the officers of county farmers' clubs.

LOUISIANA.

Institute director.—Charles Schuler, commissioner State board of agriculture and immigration, Baton Rouge.

No institutes were held in Louisiana during the past year, although an appropriation of \$2,000 had been made by the legislature for the purpose. Inasmuch as the other duties of the commissioner require his entire time and attention, application was made to the State legislature for an assistant to devote himself to the management of the farmers' institutes of the State. The bill failed to become a law, and consequently the institute work was suspended. Application has again been made for an institute conductor and for a more liberal appropriation for carrying on the work, which, if granted, will enable the department to reorganize the institutes and again carry on this important branch of the department's work.

MAINE.

Institute director .- A. W. Gilman, commissioner of agriculture, Augusta.

The farmers' institute work of the year in Maine has been very successful. Two institutes were held in each county, and the remainder of the funds was apportioned among the counties according to the extent of the agricultural interests. Most of the institutes were held consecutively during the late autumn and the late winter. The institute force consisted of two speakers from outside of the State and one or two who are residents. These lecturers were frequently assisted by local speakers. Two sessions were held at each institute, as a rule. In some localities special independent meetings have been conducted, and at Auburn a State dairy conference continuing for three days was held in December.

Fifty regular institutes consisting of 92 sessions were held during the year. The total attendance at all of the sessions was 14,143. The average per session was 145. The annual appropriation for institutes and for the dairy conference is \$3,000, not including the salary and expenses of the director, which is \$2,000 additional. Twelve independent institutes were held in connection with farmers' clubs and granges. A brief summary of the institute work of the year is published annually in the report of the department of agriculture, 6,000 copies of which are printed and distributed through the members of the legislature, the agricultural societies, granges, farmers' institutes, and other agricultural organizations.

MARYLAND.

Institute director.-W. L. Amoss, director of farmers' institutes, Benson.

A private car with Pullman equipment was purchased, which was run over the Maryland and Pennsylvania railroads for a period of twenty-four days. One-half of the coach was equipped as a lecture hall, seating 50 persons comfortably. Classes were registered in the various localities at which stops were made and the members were given free tickets for two short courses of six lectures each. The morning session was devoted to answering questions, inspecting farmers' orchards, dairies, and rendering assistance that might be requested by persons living within driving distance of the institute. Special sessions for women were held in connection with these schools, and also a boys' session at each institute. There were registered at

the institute schools 1,714 persons. The interest manifested was very satisfactory and the outlook for work of similar character in the next year is very hopeful. Forty-one institutes were held, composed of 117 sessions, with a total attendance of 8,903. The entire cost of the work, including the equipment of the movable school, was \$6,000.

One institute for colored farmers was held with an estimated attendance of 375. The movable school did much valuable work directly through the patrons who registered in the classes agreeing to attend all of the sessions, and indirectly through meeting farmers who visited the car for expert advice and who were helped by personal visits to their farms, orchards, stables, etc.

MASSACHUSETTS.

Institute director.—J. L. Ellsworth, secretary State board of agriculture, Boston.

Owing to the increased appropriation for institute work, more meetings were held than during previous years. There were 69 speakers on the State force of institute lecturers. The selection of the speakers and the subjects to be discussed are left to the local people, except that occasionally suggestions are offered by the office of the board. Eight members of the faculty of the agricultural college and five of the staff of the State agricultural experiment station were on the list of lecturers.

The local agricultural societies are responsible for the institute work in Massachusetts, and every county in the State has at least one of these societies, while most of them have several, there being no less than eight agricultural societies in Worcester County. Institutes are furnished to other agricultural organizations where the territory which they cover is not embraced by a regular agricultural society and where their line of work is specialized to such a degree that it can be better covered at their meetings than at those of the agricultural societies. As, for instance, in the case of the Massachusetts Fruit Growers' Association and of the various bee keepers' associations. During the year 156 sessions were held, attended by 18,426 persons. The average attendance was 118, and the amount expended in carrying on the work was \$1,877.26.

MICHIGAN.

Institute director.—L. R. Taft, superintendent farmers' institute, East Lansing.

During the past year county farmers' institutes have been held in 66 counties in Michigan, and with few exceptions they were continued for two days. One-day institutes were held in 63 counties. Besides the regular institutes a large number of special meetings have been held relating to sugar-beet growing, live-stock husbandry, etc. In con-

ducting the regular institutes the local arrangements are left almost entirely to the county institute society officers and to the vice-presidents acting as local managers for the one-day institutes. The attendance in nearly every case was all that could have been desired. In a large number of instances the halls were filled and many were turned away. The total attendance during the year reached 135,000, or about 14,000 more than in 1906–7.

In selecting lecturers for the farmers' institutes the officers of each county society are requested to furnish a list of topics which they wish to have discussed, and speakers are then procured who are specially fitted for discussing these topics. In most of the counties the cooperation of the county superintendent of schools has been secured and is attended with most satisfactory results.

In a large number of instances a speaker has been furnished by the county commissioner, paid from the school funds for the afternoon and evening sessions of the one-day institutes. During the forenoon and the early part of the afternoon the speaker thus furnished visits, with the local commissioner, schools in the districts where the institutes are being held and addresses the scholars upon educational matters in the afternoon and also in the evening. One State speaker is furnished from the farmers' institute force for a one-day institute, and it is expected that one local speaker will be supplied for the morning and afternoon sessions as well as one for the evening. As a rule, the topics of the forenoon and two of the afternoon sessions relate to practical farming, but not infrequently those in the afternoon and one or two in the evening are along educational lines. For two-day meetings it has been customary to send at least three State speakers, one of whom has generally been a woman.

The third annual normal institute was held at the college in November. The meeting was attended by practically all of the institute lecturers. The time was spent in discussing methods of conducting the institutes and in listening to lectures and addresses by the college faculty. A special institute train was run for three days upon the Pere Marquette road and six days on the Michigan Central Railroad, making 54 stops. These stops at the different stations varied from one hour to an hour and fifteen minutes. Thirty to forty minutes of the time were taken up by the lectures in the coaches, and the remaining portion was given to the examination of the exhibits in the baggage cars. The exhibits included samples of seed corn of different varieties, seed testers, spray pumps, spraying solutions, samples illustrating grafting, budding, and pruning; milk tester, forage plants, grasses and grains, charts, and diagrams. There was also a very interesting exhibit of road-making materials, with drawings and photographs of State roads under construction. Much interest was also shown in the exhibit of commercial fertilizers.

The thirteenth annual round-up farmers' institute was held at the agricultural college in February. Among the special features were the forestry session, the agricultural sessions, the live stock session, and the dairy session.

Nine hundred and sixty-nine sessions of regular institutes were held during the year, with an attendance of 121,654. The round-up institute consisting of 11 sessions, with a total attendance of 5,390, and the normal institute consisting of 10 sessions, with a total attendance of 260 lecturers, were held. Independent institutes were held in a number of counties, and also a great number of picnics, harvesthome meetings, etc. The total cost of the institute work for the year was \$8,443.51, including administration and office expenses and the printing and mailing of 10,000 copies of the 300-page institute report. The actual cost of holding the regular institutes has been about \$3 per session at the one-day institutes and \$10 per session for two-day institutes. This means about \$7 for the one-day institute and \$50 for the two-day institute.

MINNESOTA.

Institute director.—A. D. Wilson, director of farmers' institutes, St. Anthony

During the past year the institute director has been engaged in organizing farmers for cooperation in producing farm crops. A corn club, a potato club, a cow-testing association, and a number of clubs of similar character have been formed at different places. The farmers of the corn and potato clubs are working together to produce one special variety of these crops instead of each farmer producing a different variety, and all are striving by cooperation to improve the variety, and also improve their marketing conditions. One county, Meeker, has been thoroughly organized, 16 township organizations having been formed and a central organization, all cooperating in improving agricultural conditions in that county. They have already formed a stock-shipping association to handle live stock grown by the members of the county clubs, and are considering the formation of a cooperative packing company to take the place of the shipping association.

Twelve articles on subjects of interest to farmers have been prepared and sent to 450 of the local papers in Minnesota, requesting them to publish one article each month during the coming year.

Two hundred and seventy-two institutes were held during the year composed of 547 sessions with an attendance of 92,091. The amount expended for institute purposes, including the publication of the institute annual, amounted to \$20,454. Twenty-three independent institutes were held, with an attendance estimated at 4,600. Thirty-seven women's institutes were held during the summer in connection

with the regular institutes. The new features that have been introduced, to the perfecting of which special attention is being given, is the organization of cooperative clubs and the furnishing of agricultural literature to county papers.

MISSISSIPPI.

Institute director.—E. R. Lloyd, director of farmers' institutes, Agricultural College.

At the last session of the legislature the appropriation for institute work was increased \$2,000 per year, making the funds now available for this work \$5,000 annually, exclusive of the director's salary. A law was also enacted by the State legislature making it possible for each county in the State to establish and maintain a county agricultural high school. As soon as a county complies with the law establishing the school, the State will appropriate annually to each school \$1,000. The farmers' institute was an important factor in creating a public sentiment in favor of these schools, and the institute department also cooperates with each school by furnishing lecturers, corn judges, bulletins, etc. The institute has assisted the schoolboys' corn club movement and is cooperating with these clubs as far as possible. Clubs are now organized in about forty counties. Each county club exhibited at the State fair this year, and their exhibits were the most attractive features of the fair.

In former years one of the greatest difficulties in Mississippi was getting the farmers sufficiently interested to attend the meetings. This has largely disappeared, and now the difficulty is to get enough money and men to hold the institutes that the farmers are demanding. During the year 129 institutes were held with a total attendance of 28,910. The amount expended in institute work was \$3,000, not including the director's salary. Five independent institutes were held, with an estimated attendance of 510, and a round-up institute continuing through eight sessions with an attendance of 970.

MISSOURI.

Institute director.—G. B. Ellis, secretary State board of agriculture, Columbia.

Eight hundred and seventy-five sessions of institutes were held in Missouri during the year, with an attendance of approximately 40,000 persons. The appropriation for institute purposes by the State is \$5,000. The work is under the direction of the secretary of the State board of agriculture. Five independent institutes were held, with an attendance estimated at 2,000, and ten sessions of a round-up institute, with an attendance of 8,000. A seed and soil special train was also operated. Five boys' encampments were held.

and also a housekeepers' conference. Fourteen members of the agricultural college faculty and experiment station staff contributed one hundred and twenty days of service as lecturers.

MONTANA.

Institute director.—F. B. Linfield, director agricultural experiment station, Bozeman; F. S. Cooley, superintendent of farmers' institutes, Bozeman.

Seventy-two institutes were held in Montana, with a total attendance of 12,293, at a cost of \$7,500. Thirteen agricultural college and experiment station lecturers were upon the institute force. In addition to the regular institute meetings, a special dairy train was run across the State, continuing two weeks and making twelve stops. Plans are being formulated for the coming season to introduce agricultural and vocational lecture courses into the high schools. A number of high schools of the State have applied for courses of this character. A number of dry-farm demonstrations have been held for illustrating the possibilities of dry-land cropping under various tillage methods. Plans are also being perfected for the inauguration of movable schools of agriculture and domestic science.

NEBRASKA.

Institute director.—E. A. Burnett, director agricultural experiment station, Lincoln; Val Keyser, assistant superintendent farmers' institutes, Lincoln.

The new work taken up by the department of farmers' institutes in Nebraska for the past season was a short-course, or farmers' institute, school. This was held at Pawnee City in place of the regular farmers' institute. Three courses of instruction were offered, and lectures in these courses were given each forenoon of the week, supplemented by demonstrations for the afternoon sessions. The officers of the farmers' institute were authorized to take charge of the school, which was held during the week of February 10 to 15. A course of instruction was given in feeds and feeding, with judging demonstrations each afternoon, using beef cattle and hogs. A course of instruction in soils and soil problems was also given. Soils collected in Pawnee County were used for this work. There was also a course of lectures for women on foods, cooking and serving, with demonstrations for each lecture.

The total attendance of the school was 120, although no special effort had been made to get a large attendance.

The department made a special effort last year to encourage the work of women in farmers' institutes. Three women speakers were employed throughout the season. Much interest was manifested, and about 40 counties organized women's auxiliaries. The institutes as a whole were much better attended than in previous years, and

interest was taken in all phases of the work. The total number of regular institutes held was 175, composed of 602 half-day sessions, with a total attendance of 93,824. The amount appropriated for institute purposes was \$13,617. Thirteen members of the State agricultural college and experiment station staff participated in institute lecturing. One normal institute was held at Lincoln, continuing from October 28 to November 2, for the instruction of the lecturers. Some of the older institute points held sessions with local talent without the assistance of the State speakers. A farmers' institute convention was held January 24, 1908, in connection with the meetings of organized agriculture, and about 300 local institute managements attended. Fourteen boys and girls' institutes were held in addition to the regular institutes, with a total attendance of 4,125. Three bulletins treating the subject of corn culture were furnished the boys during the season. A short course, continuing for six days, was held. attended by 60 men and 60 women. Four teachers were employed in giving instruction. Two of these were from the agricultural experiment station staff.

NEVADA.

Institute director.—J. E. Stubbs, president Nevada State University, Reno. No institutes were held in Nevada during the year.

NEW HAMPSHIRE.

Institute director.—N. J. Bachelder, secretary State board of agriculture, Concord.

Institutes were held in every county in New Hampshire with one exception. The entire number was 16, and the number of sessions 32, with a total attendance of 2,500. The amount appropriated for institute purposes was \$1,000, of which \$900 was expended. One thousand five hundred copies of the proceedings were printed and distributed.

NEW JERSEY.

Institute director.—Franklin Dye, secretary State board of agriculture, Trenton.

Thirty-seven farmers' institutes were held in New Jersey during the past year, composed of 120 sessions, with an attendance of 10,154 persons. Special institutes consisting chiefly of demonstration work in dairy cattle and barn architecture were held, at which the interest on the part of the farmers and dairymen, who attended in large numbers, was very pronounced. The general lines of instruction in the institutes were soils, fertilizers, green crops for soiling and for fertilizing, the various crops best to grow, methods of cultivation and marketing, seeds, dairying, poultry, fruit production, market gardening, etc. The total cost of the institutes was \$2,500.

NEW MEXICO.

Institute director.—J. D. Tinsley, superintendent farmers' institutes, Agricultural College.

Farmers' institute meetings were held in 17 of the 25 counties. There were 68 sessions, with an attendance of 685 persons, as against 28 sessions and 969 in attendance the previous year. The local-society plan of organization is being continued, but it is found difficult to get the people to hold meetings regularly. The Territory appropriated nothing directly for institute purposes, but the expenses have been paid from funds appropriated by the Territory for support of the college. The dates and places for holding institutes are arranged by the superintendents, and the programmes by the local committees or farmers' institute societies.

NEW YORK.

Institute director.—R. A. Pearson, commissioner of agriculture, Albany.

In the season of 1907-8, 307 regular institutes were held in New York State. These comprised 1,471 sessions, which were attended by 149,418 persons. The work was conducted under an appropriation of \$25,000. There were held also 9 separate bee-keepers' institutes, 7 special poultry institutes, and 23 special women's institutes. At most of the regular institutes there was one speaker in attendance as a representative of the department of education, who spoke upon the subject of rural education. Throughout the season at least one and frequently two experts were in the field representing the State experiment station at Geneva and speakers from the staff of the State agricultural college assisted as their class work permitted.

As usual, the regular institute season was started with a normal institute, which was held at Cornell University. At that meeting the institute workers heard lectures from well-known agricultural scientists and received these lectures also in printed form. They also had a review of the work done in experimental lines during the previous year. The farmers' institute fund was drawn upon also to assist at annual meetings of some of the agricultural organizations.

One of the most successful innovations of the institute work this year has been the holding of county conferences prior to making institute plans. A conference was held in each county, attended by presidents of agricultural organizations, masters of granges, and institute correspondents. These persons were told how many days' work could be done in their county, and they recommended places at which meetings should be held, duration of meetings, and subjects for discussion. These conferences undoubtedly have resulted in increased interest and attendance at the institutes during the past year.

NORTH CAROLINA.

Institute director.-W. A. Graham, commissioner of agriculture, Raleigh.

Institutes were held in all of the counties of North Carolina excepting three. There were in all 423 sessions. One hundred and fifty-four of these were sessions for women. The total attendance was 40,350 men and 12,628 women. The total cost of the institutes was about \$7,500. A round-up institute continuing through 8 sessions was held, with an attendance of 400 persons. The experiment station ran a corn train, continuing for about ten days. The success of the women's institutes was pronounced, indicating that the way is open in the Southern States for the introduction of institutes for women as soon as a sufficient number of capable lecturers can be secured to give instruction.

NORTH DAKOTA.

Institute director.—T. A. Hoverstad, superintendent of farmers' institutes, Fargo.

Ninety institutes were held during the year. Eighty-one of these were one-day meetings, 8 two-day, and 1 four-day. In all, 233 sessions were held, and there was a total attendance of 38,000 people. There were, as a rule, three lecturers at each meeting. The interest in the institute work is growing rapidly. The institute force is endeavoring to find out the problems that the farmers are most interested in with a view to preparing programmes for the discussion of these questions. Last year special effort was made to interest the farmers in a system of farming that would produce a large crop each year and at the same time leave the land in good condition for the succeeding crop. It is believed that considerable interest was awakened in this subject and that material improvement will result from its discussion. Twelve independent institutes were held, besides a grain-growers' convention, a good-roads convention, and a domestic-science meeting. Interest in women's institutes has increased. During the year two were held, at which the interest and attendance were quite gratifying.

OHIO.

Institute director.—T. L. Calvert, secretary State board of agriculture, Columbus.

During the institute season of 1908, 298 institutes were held, representing 1,490 sessions, and a total attendance of 461,515. The amendment to the farmers' institute law of March 31, 1906, permits the State board of agriculture to aid not more than four institutes in each county, and further provides for an assessment on each county of \$250, one-half to go to the State board of agriculture for per diem and ex-

penses of speakers, and the remainder to be divided among the 4 institutes for the purpose of defraying local expenses. Of the 88 counties, 21 did not avail themselves of the opportunity of procuring their full quota. Twenty-seven counties, on the other hand, requested more than could be granted them according to law. Twenty-three independent institutes were held during the season, with an estimated attendance of 9,320.

OKLAHOMA.

Institute director.—T. M. Jeffords, superintendent of farmers' institutes, Guthrie.

Governmental conditions in Oklahoma during the past year have been in a somewhat chaotic stage. During that period the State was passing from Territorial organization to that of statehood. The constitutional convention divided many of the counties in older Oklahoma and created 40 new counties on the Indian Territory side of the line. The first legislature in session passed an act, approved March 2, 1908, creating the State board of agriculture. Under its provisions the board of agriculture was given entire jurisdiction over the system of farmers' institutes within the State, and the sum of \$3,000 was appropriated for the purpose of organizing farmers' institute work in the new counties. A superintendent of institutes has been selected and placed in personal charge of this work under the direction of the board, and a comprehensive programme for the ensuing year has been mapped out. The counties under this programme will be divided into groups in such manner that one set of lecturers can cover a group in ten days or two weeks. The superintendent recommends that a two-day institute be held in each county at the most available point; the first half day to be devoted to agricultural demonstration in judging stock, corn, cattle, etc., the afternoon of the first day to take up the regular programme of the institute, and in a separate room there will, at the same time, be conducted a class for boys in corn and cattle judging, and also be given practical demonstrations to teachers of how to teach agriculture and domestic science in the schools. The night sessions are to be of a general character of interest to farmers, business men, and teachers. A stereopticon will be used to illustrate evening lectures. No regular institutes were held during the past year owing to the change from Territorial to State government above mentioned.

OREGON.

Institute director.—J. Withycombe, director agricultural experiment station, Corvallis.

The management of farmers' institutes in Oregon has been placed under the direction of the board of regents of the agricultural college.

By their direction a committee of three from the experiment station staff has been selected to conduct the institute work. Thirty-two institutes were held, composed of 79 sessions, with an attendance of 7,500. The agricultural college furnished two speakers at each institute, and four members of the agricultural experiment station staff participated in the instruction work. A demonstration train was run through the Willamette Valley which made 17 stops, at which meetings were held and addresses given. The total attendance upon these demonstration trains was about 3,000.

PENNSYLVANIA.

Institute director.—A. L. Martin, deputy secretary of agriculture, and director of farmers' institutes, Harrisburg.

In addition to the 217 regular institutes, there were held 4 movable institute schools which continued for four days. At these schools the subjects of dairying, dairy husbandry, etc., as relating to barn and stable management, feed, light and ventilation, proper sanitary conditions for handling milk, milk testing by Babcock test was quite thoroughly considered by the classes. Horticulture in its various lines, such as orchard location, varieties, planting, pruning, thinning of fruit, spraying, etc., formed a portion of the class work upon this subject, and in the poultry industry there were treated the subject of breeds, proper housing, food, egg production, and preparation for market. Requests for schools of this character have come in from most of the counties of the State. The number of sessions of general institutes held was 989, and the total attendance 145,353. The appropriation for institute purposes amounted to \$23,000. Eight lecturers from the faculty of the agricultural college and two from the staff of the experiment station were employed in giving instruction. Seven independent institutes were held with an attendance of 8,665. and 1 round-up institute continuing through 9 sessions with an attendance of 2,500. The total attendance at the special institutes and movable schools was 2,200, and at the farmers' picnics 24,000. At all two-day institutes one session was devoted to women's work, over which a lady was expected to preside, and a programme suited to the discussion of this topic was carried out. Eight thousand copies of an abstract of the proceedings of the institute are printed and distributed through the regular mailing list of the department of agriculture.

PORTO RICO.

Institute director.—D. W. May, special agent in charge of agricultural experiment station, Mayaguez.

In Porto Rico no institutes were held last year. The work of giving instruction in a peripatetic way to the farmers of the island

is in the hands of the experiment station staff. The officers of the experiment station for the present find it more effective to visit the planters from time to time and give practical demonstrations at their homes.

RHODE ISLAND.

Institute director.—John J. Dunn, secretary State board of agriculture, Providence.

Fifteen institutes were held in the State during the year, with a total attendance of 1,800. The total cost of the institutes last year was \$125, not including advertising and the salary of the State director. No special appropriation is made for institute purposes, but the board of agriculture sets aside each year from the \$20,000 which it receives from the State so much as may be necessary for meeting institute expenses. Five members of the agricultural college faculty and two members of the State experiment station staff were employed in giving instruction.

SOUTH CAROLINA.

Institute director.—D. N. Barrow, professor of agriculture, Clemson College.

Owing to the fact that the farmers' institute work in South Carolina is paid for out of the income of Clemson College, and as the college has had numerous improvements under way in the constructing of large dormitories and other necessary buildings, only a small amount could be appropriated for carrying on farmers' institutes. Eighteen counties, however, were visited, and several institutes were held in each county. These meetings were attended by 13,392 farmers. During the spring of 1907 the Southern Railway gave the college the use of two cars, one a baggage coach and the other a day coach. The large baggage coach was used for the display of material illustrating the work of the various departments of the college and experiment station. Exhibits were made by the horticultural division, the entomological division, the chemical department of the college, and the agricultural division. Thirty-five places were visited upon the trip, and between 12,000 and 15,000 people inspected the exhibits. Experts from the agricultural college and the experiment station accompanied the train and delivered lectures upon agricultural subjects and explained in detail the character and practical value of the several exhibits.

SOUTH DAKOTA.

Institute director.—A. E. Chamberlain, superintendent of farmers' institutes, Brookings.

Farmers' institutes in South Dakota are under the control of a committee of the board of trustees of the agricultural college, who

conduct the work through a superintendent of institutes whose headquarters is at Brookings. The institute superintendent devoted a considerable part of the period in which no institutes were held to sending out letters of instruction relative to the selection of seed and to the cultivation of corn. Accompanying each of these seed-corn letters was a circular requesting the recipient to select some of his best corn for exhibit at the National Corn Show, held in Chicago in October. As a result of this the State was creditably represented at that exposition. Over 5,000 bulletins upon scab in sheep, internal parasites, and other subjects of interest were mailed from the office to stock raisers throughout the State. Twelve thousand fruit lists, with instructions for buying, planting, and selecting fruit trees, were printed and distributed. The institute season opened September 17, 1907, and closed March 23, 1908. Meetings were held in 86 towns. Other meetings had been appointed, but for various reasons could not be held. There were 29 one-day institutes, 55 two-day, and 2 threeday. The total number of sessions was 290, and the attendance at the meetings 43,560. The total cost of the institutes was \$6,995. The appropriation for the coming year is \$7,000. Two members of the faculty of the agricultural college contributed 265 days of service as lecturers. There was one independent institute held, with an attendance of about 400. One of the instructors in the domestic science department at the college at Brookings accompanied the corps of lecturers and gave instruction, usually at the general meetings, but in a number of instances in separate halls, and to ladies exclusively. The institute superintendent has arranged for holding a number of schools, continuing for three days, devoted to stock and corn judging. These are intended to be self-sustaining through contributions by the community in which the schools are held and from membership fees.

TENNESSEE.

Institute director.—John Thompson, commissioner of agriculture, Nashville.

Institutes were held in Tennessee in all of the counties excepting 12. The total number of one-day institutes was 81, and 3 three-day. The number of sessions is reported at 186, and the total attendance at 18,915. The cost of the institutes for the year was \$4,300, not including the salary and expenses of the State director, which would increase this amount by \$2,800. Two members of the State agricultural experiment station staff lectured at the institutes and contributed eighty-four days of time. Three round-up institutes were held, composed of 24 sessions, with an attendance of 5,500.

A women's auxiliary to the farmers' institute was organized at Knoxville May 29, 1908. An abstract of the proceedings of the

round-up institute is published in a biennial report by the commissioner of agriculture, and is distributed by mail upon application to the commissioner.

TEXAS.

Institute director.—E. R. Kone, commissioner of agriculture, Austin.

The thirtieth legislature of Texas in organizing the department of agriculture provided that the commissioner shall "encourage the organization of agricultural societies, and for the benefit of the agricultural communities shall cause to be held farmers' institutes at such times and at such places throughout the State as will best promote the advancement of agricultural knowledge and the improvement of agricultural methods and practices. He shall publish and distribute such papers and addresses read or delivered at these institutes as he shall deem to be of value to the farming interest." Under this act the commissioner held 36 one-day institutes between November 22, 1907, and May 18, 1908. No record was kept of the attendance. The total cost is given at \$382.25. No specific appropriation has been made for institute work, but the expenses are paid from general funds that are appropriated for dissemination of agricultural information. Two members of the college faculty and three of the experiment station staff lectured at the institutes, contributing twenty-one days of time. This law is the first statutory provision in recognition of the farmers' institute work in Texas. The conditions imposed by the board of agriculture upon which institutes can be held are, first, that no institute shall be held at any place unless a request is filed for such an institute with the commissioner of agriculture. Second, there must be some local organization in the community that will be responsible for the preliminary arrangements necessary to hold the institute. Third, where no such local organization already exists the organization of a body of farmers, with a president and a secretary, for the purpose of arranging for an institute is all that will be required. The officers of the local organization are expected to advertise the date of the institute by means of the local papers and by handbills posted in conspicuous places, and are to meet such expenses as may be necessary for hall rent, janitor services, etc.

UTAH.

Institute director.—Lewis A. Merrill, superintendent of farmers' institutes, Salt Lake City.

A new feature of the institute work in Utah inaugurated during the past year is the farmers' school held in different localities continuing during five days, not more than one of these schools being held in any one county. At these schools a registration fee is charged and the

locality must furnish rooms for holding the school as well as provide light and heat. As a result of the experiment there have come already applications for a number of similar schools to be held during the coming season. Eleven of these schools were held during the year. There were also 14 regular institutes, 4 continuing one day and 10 two days. The entire attendance at all of the institutes during the year was 26,926. By comparing this with the attendance of the previous year (1,320) the progress of the institutes in Utah can be judged. Arrangements have been perfected for sending out an institute train next year which will cover every portion of the State in which railroad lines are found.

A field demonstration institute was held, at which about 500 persons were in attendance. There were also 13 women's institutes composed of 74 sessions. The method of conducting the institutes has been to hold men's and women's sessions separately during the day and conjointly at night. In order that a farmers' school may be held each county must guarantee at least 50 students and a fund of \$50 to secure a five-day institute. Ten thousand copies of an annual report of the institute work were printed and distributed.

VERMONT.

Institute director.—F. L. Davis, secretary State board of agriculture, Woodstock.

The farmers' institutes in Vermont are held under the auspices of the board of agriculture. During the past season 28 institutes were held, consisting of two sessions each, with a total attendance of 5,160. The expense of the institutes for the year was \$2,584.05. Special attention was given in the meetings to the development of the dairy cow and to the subjects of good roads, forestry, fruit growing, and truck farming. Four thousand copies of a report of the proceedings of the institutes were published and distributed. The director of institutes has called the attention of the board of agriculture to the importance of holding the meetings in the smaller villages and towns remote from the regular lines of railroad travel, and arrangements are being made to hold meetings in these outlying districts during the coming year.

VIRGINIA.

Institute director .- G. W. Koiner, commissioner of agriculture. Richmond.

By the provisions of an act of the Virginia legislature which took effect July 1, 1908, the farmers' institutes are under the control of the commissioner of agriculture in cooperation with a member of the board of agriculture in each Congressional district. Under the old law the institutes were wholly under the direction of the members of

the board of agriculture representing the ten Congressional districts and an appropriation of \$500 for each district was available for meeting the expenses. There was no central supervision of the institute work of the State and comparatively few institutes were held, and no data respecting the number or attendance have been received.

The State farmers' institute organized four years ago at Roanoke, Va., held its annual meeting in 1907 at Roanoke, continuing through eight sessions, with a total attendance of 600. This organization is independent in character, and its expenses, which amounted to \$739, were met by private subscription. The commissioner of agriculture, who now has the institutes in charge, has arranged for carrying this work during the coming year into all sections of the State.

WASHINGTON.

Institute directors.—R. W. Thatcher, acting superintendent farmers' institutes, Pullman; O. M. Olson, deputy superintendent farmers' institutes, Pullman.

After an interval of two years, in which no State aid for farmers' institutes was available, the legislature of 1907 made an appropriation of \$10,000 for institutes for the biennium beginning April 1, 1907.

Seventy-eight institutes were held in Washington in 1907–8, composed of 240 sessions with a total attendance of 15;346, at a cost of \$5,000, all of which was appropriated by the State. Twelve lecturers from the agricultural experiment station staff were upon the institute force and contributed one hundred and ninety-eight days of time. There were conducted in addition to the regular institutes three traveling dairy schools continuing through five days each; 1 five-day normal institute; 15 picnics; 5 grange specials; 8 street fairs; and 4 farmers' educational trains. The management intend to introduce into the institute work next year the teaching of domestic science.

An important feature of the work this year was the farmers' demonstration trains, three of which were operated over the lines of the steam railways in eastern Washington, and one on the Spokane and Inland Electric Railway. These trains were provided with cars containing exhibits, with day coaches in which the lectures might be held in case of inclement weather, and with private cars for the speakers and the railway officials who were in attendance. The stops rarely exceeded two hours at a place, and the work was necessarily inspirational rather than instructional. The trains aroused great interest in the work of the experiment station and the State college. A traveling dairy school with five-day stops was operated for one month in the dairy section adjoining Puget Sound in western Washington, and was well attended. The total attendance upon these trains was 11,910, and at the traveling dairy school 1,264.

WEST VIRGINIA.

Institute director.—J. B. Garvin, secretary State board of agriculture, Charleston.

During the past year the institute work in West Virginia has been placed directly in charge of the secretary of the board of agriculture. During the year 112 institutes were held, consisting of 365 sessions with an attendance of 16,748, at a cost of \$5,644.41. Field meetings for demonstration work were held in six counties, with a total attendance of 3,000, and were reported to have been very satisfactory. In May, 1908, a department of field work was established and a superintendent was appointed. The work of the department of field work has been outlined as follows:

- (1) To conduct movable schools of agriculture lasting for one week. These are to consist of classes in corn judging, live-stock judging, lectures upon the breeding of live stock and animal nutrition, fruit growing, dairying, and poultry raising.
- (2) To promote agricultural education by means of educational trains.
- (3) Visiting State normal schools and teachers' institutes and delivering lectures upon agricultural subjects.

WISCONSIN.

Institute director.-G. B. McKerrow, director farmers' institutes, Madison.

Institutes were held in Wisconsin in all of the counties excepting one. The total number was 141, made up of 47 one-day, 93 two-day, and 1 three-day institutes, and consisting of 567 half-day sessions. The total attendance was 89,244, and the total cost of the institutes was \$12,000, not including the publication of 60,000 farmers' annuals (a 320-page book), which was about \$5,500. There were in addition 25 cooking schools, made up of 51 sessions. A special-topic institute was held, and a number of special dairy institutes—an enlargement of the regular institute as it has been held in the dairy districts during the past fifteen years. Road building was discussed at all of the meetings, in order that the country people might vote intelligently upon an amendment to the constitution which proposes to permit the State to use public funds in internal improvements.

WYOMING.

Institute director.—J. D. Towar, director agricultural experiment station, Laramie.

Eleven institutes were held in Wyoming during the past year, composed of 46 sessions, and attended by 3,359 persons. The cost of the institutes, in addition to the local expenses made by the counties, was \$767.61. Nine members of the agricultural college faculty and seven from the experiment station staff were employed upon the lecture

force and contributed eighty-seven days of time. There are a great many new settlers coming into the State, and the demand for farmers' institutes is growing. There are, however, several counties given over entirely to the live-stock work on immense ranches where farmers' institute work is not looked upon with favor. The large ranchman does not welcome the small farmer in his midst. Where meetings were held the past year there was every evidence of interest and a desire to have the institutes continued. A movement is on foot to conduct an institute train, and it is hoped that this may be perfected early in the spring.

STATISTICS OF FARMERS' INSTITUTES, 1908.

Number of institutes held and the approximate attendance during the year ended June 30, 1908.

State or Territory.	Number of one- day in- stitutes.	Number of two-day institutes.	Number of three or more day institutes.	Total.	Total number of sessions.	Total attendance at all sessions.	Average per session.
Alabama	40			40	63	8,844	190
Alaska a	56				56	2,673	47
Arizona	50	4	2	56 56	64	5,596	47 87
ArkansasCalifornia	49	37	$\frac{2}{2}$	88	294	27, 912	96
Colorado	118	7	1	126	240	38, 930	162
Connecticut	21	i	1	25	53	3,700	86
Delaware	11	5		19	52	4, 905	75
Florida	23	3		26	39	3,316	85
Georgia	33	2		40	84	12,000	142
Hawaii	4	-		4	4	150	37
Idaho	$\hat{2}$	7	3	12	66	5,650	85
Illinois	I	(2	46	108	627	122, 523	195
Indiana	161	156	4	321	1,112	195, 912	176
Iowa		75		75	400	75,000	187
Kansas	111	(5		176	473	33, 684	71
Kentucky	4	128		132	514	21,690	42
Louisiana a							
Maine	50			50	97	14, 143	145
Maryland	21	20		41	117	8,903	76
Massachusetts	127			127	156	18, 412	118
Michigan	2.8	76	2	326	969	121,654	126
Minnesota	237	5		272	547	92,091	167
Mississippi	121	3	2	129	274	28, 910	104
Missouri	150	100		250	875	40,000	46
Montana	66	5	1	72	156	12, 293	78
Nebraska	61	100	5	175	602	93, 824	156
Nevada a	16			16	20	2,500	70
New Hampshire	30	7		37	32 120	10, 154	78 85
New Jersey New Mexico	47	3	50	50	68	3,685	54
New York.	1:2	161	4	307	1,471	149, 418	102
North Carolina.	194	101	T	194	423	52, 978	125
North Dakota	81	8	1	90	233	38,000	163
Ohio		208		298	1,490	461,515	310
Oklahoma a					-,		
Oregon	30	2		32	79	7,500	95
Pennsylvania	36	179	2	217	989	145, 353	147
Porto Ricoa							
Rhode Islan 1	15			15	16	1,800	112
South Carolina	33	1		40	41	13, 392	326
South Dakota	23	. 55	2	86	230	43, 560	150
Tennessee	81		3	84	186	18, 915	102
Texas	36	10		36	288	26, 926	94
Utah	$\frac{4}{28}$	10	11	25 28	288 56		94
Vermont	28			28	90	5,160	92
Washington.	57	17	4	78	240	15,346	64
West Virginia	12	100	4	112	365	16,748	46
Wisconsin	47	93	1	141	567	89, 244	157
Wyoming.	5	4	$\frac{1}{2}$	11	46	3, 359	75
,							
Total	2,737	1,808	98	4,643	14,934	2,098,268	140

a No institutes held.

^b No report.

Financial statistics of the farmers' institutes for the year ended June 30, 1908.

	Funds ap	propriated.	Cos	Appropria-		
State or Territory.	State.	College and other funds.	Total cost.	Cost per session.	tion for the season of 1909.	
AlabamaAlaska a	\$600.00	\$400.00	\$1,000.00	\$15.87	\$1,000.00	
Arizona	1,745.00		1,745.00	31.16	(b)	
Arkansas	1,500.00		1,199.40	18.74	1,500.00	
California	6,000.00	2,000.00	8,000.00	26. 87	6,000.00	
Colorado	5, 560. 46	2, 164. 00	7,724.46	32. 19	5,000.00	
Connecticut	1,700.00 600.00	125.00	825. 00 725. 00	28. 78 13. 94	1,500.00 600.00	
Florida	2,500.CO	120.00	2,400 00	61, 53	3,000.00	
Georgia.	2,500.00	1,500.00	4,000 00	47. 61	4,000.00	
Hawaii	-,	74.49	72.60	18. 15	(b)	
Idaho	1,000.00		773. 90	11.72	1,000 CO	
Illinois	24,000.00	5,540.00	30.097.99	48.00	7,650.CO	
Indiana	10,000.00	8,000.00	17,000 00	15.28	10,000.00	
Jowa	5,350.75	2,604.23	7,954.98	19.88	6,000 00	
Kansas	4,500.00 8,982.85	1,995.51	6, 495. 51 8, 982. 85	13. 73 17. 48	6,000 00 13,000 00	
Louisiana a	2,000.C0		0, 902. 00	17.40	2,000 00	
Maine	3,000 CO		¢3,000.00	30. 93	3,000.00	
Maryland	6,000 CO		6,000.00	51.28	6,000.00	
Massachusetts	4,000 CO		c 1, 608. 95	10.31	4,000.00	
Michigan	8,500 CO		8, 443. 51	8. 71	(b)	
Minnesota	18,000 CO	2,454.50	20, 454. 50	37.32	18,000.60	
Mississippi	3,000.00	2,000.00	5,000.C0	18.06	5,000.00	
Missouri Montana	5,000.00 7,500.00		5,000.00 7,500.00	5.71 48.07	$\binom{b}{7,500.00}$	
Nebraska	10,000.00	3,617.68	10,760.47	17.87	10,000.00	
Nevada a	10,000.00	3,011.00	10,100.11	11.01	10,000.00	
New Hampshire	1,000.CO		c 900. CO	28.13	(b)	
New Jersey	2,500.C0		2,500.00	20.83	8,000.00	
New Mexico		1,415.00	1, 425. 00	20.95	800.00	
New York.	25,000.C0		23, 400.00	15.90	25,000.60	
North Carolina.	7,500.00	701 / 7	7,500.00	17.72 28.85	(b)	
North DakotaOhio	6,000 C0 22,000.C0	721. 05 1, 986. 15	6,721.05 19,882.77	13.34	6,000.00 22,000.00	
Oklahoma a	1,285.29	1, 500. 15	605. 58	10.04	3,000.00	
Oregon	2,500.00		2,100.00	26.58	2,500.00	
Pennsylvania	23,000.00		23,000.00	23. 25	23,000.00	
Porto Rico a						
Rhode Island	125. CO		c 125. CO	7.81	(b)	
South Carolina	2,000.C0		1,183.71	28.87	750.00	
South Dakota	7,000.00		6, 995. 42	24. 12	7,000.00	
Tennessee	5,000.00 382.25		4,390.00 c382.25	23.12 (b)	5,000.00	
Utah	1,500.C0	1,985.32	3,485.32	12.10	2,500.00	
Vermont.	5, 000. CO	1,000.02	2, 584. 05	46. 13	(b)	
Virginia b						
Washington	5,000.00		5,000.00	20.83	5,000.00	
West Virginia	5,644 41		5, 644. 41	15. 43	(b)	
Wisconsin	20,000 CO		12,000.C0	21.16	20,000.00	
Wyoming	1,000.CO		¢ 767. 61	16.68	1,000.00	
w young	· ·					
Total	286, 976. 01	38,593.53	297, 356, 89	19.91	253, 300. 00	

a No institutes held. b No report. c Not including the salary of the director.

Comparative statement of farmers' institutes.

	Appropriations.			ber of ions.			Attendance.				
	1905-6	1906–7	1907-8	1906-7	1907-8	1905–6	1906–7	1907-8	1905-6	1906–7	1907-8
Alabama	\$600.00	\$600.00	\$1,000.00	33	63	35	24	40	8,590	2,857	8,844
Arizona	608.85	300.00		20	56	21	20	56	1,307	1,000	2,673
Arkansas	400.00		1,500.00	41	64	31	40	56	7, 150 22, 801	3,000	5,596
California	9,000.00 4,000.00	6,000.00 5,003.19	8,000.00 7,724.46		294 240	83 40	84 62	88 126	22,861 16,675	20,470 16,900	27,912 33,930
Connecticut.	1,825.00	2,435.57	1,724.40		53	24	38	25	4, 895	9, 522	3,700
Delaware	725.00	700.00	725.00	51	52	18		19	7,200	9,210	4,905
Florida		7.00	2,500.00		39		1	26		30	3,316
Georgia	2,500.00	2,500.00	4,000.00		84	21	(b)	40	4,500	(b)	12,000
Hawaii	33. 45 1,000. 00	62.05 142.08	74.49 1,000.00	6	66	$\frac{4}{21}$	3	12	300 7,875	500 550	150 5,650
Idaho	30, 281. 55	28,978.96		589		108	111	108	79, 428	333,350	122,523
Indiana	12,500.00	12,700.00	18,000.00	936		250		321	129,894	177, 441	195, 912
Iowa	8,096.06	7,425.00	7,954.98	310	400	69		75	66,959	51,000	75,000
Kansas	2,000.00	4,064.00 13,000.00	6, 495. 51	358	473	155	135	176 132	27,300	20,200	33,084
Kentucky Louisiana	1,750.00 2,000.00	2,000.00	8,982.85 2,000.00		514	$\frac{25}{22}$	123 10		2,657	26,836 (b)	21, C90 (a)
Maine	5,000.00	5,000.00	3,000.00			50	33	50	6,967	4,771	14,143
Maryland	6,000.00	6,000.00	6,000.00	121	117	49	23	41		9,833	8,903
Massach'tts	3,000.00	2,750.00		155	156		126	127	19,125	19,692	18, 412
Michigan	15,000.00 20,238.40			935 282	939	335 105	329 139	326 272	122, 573 51, 211	115, 136	121,654
Minnesota Mississippi	3,000.00	3,000.00		296	547 274	110		129	10,000	67,0€3 17,945	92,091 28,910
Missouri	5,000.00	5,000.00		372	875	156		250	36, 900	46,511	40,000
Montana	5,000.00	5,000.00	7,500.00	78	156	71	70	72	7,890	7,541	12,203
Nebraska	8,607.00	8,684.04	13,617.68	442	602	160	136	175	72,894	65,419	93,824
Nevada a N. Hampsh'e	2,100.60	1,600.00	1,000.00	34	32	16	15	16	3,000	3,500	2,500
New Jersey.	3,000.00	3,060.98		132				37	11,611	10,399	10,154
New Mexico.	(a)	1,900.00	1,425.00	29	. 68	(a)	24	50	(a)	970	3,685
New York	20,000.00				1,471	259		307	134, 989	105, 196	149,418
N. Carolina N. Dakota	5,500.00 6,379.07	6,500.00 6,000.00	7,500.00 6,721.65	246 99		96 43		194 90	25, 950 20, 310	31,980 9,709	52,978 38,000
Ohio	17, 629. 89	22,000.00		1,495		245		298	81,816	92,303	461,515
Oklahoma	650, 00	550.00	1,285.29	99		31	40		7,460	6,715	(a)
Oregon	2,500.00	3,000.00	2,500.00	148		44		32	16,350	22,200	7,500
Pennsylv'a Porto Rico	20,500.00	20,500.00 (a)	23,000.00 (a)	981 (b)	989	226 1	334 (a)	217	165, 553 50	147,895 (a)	145,353 (a)
Rhode Isl'd	100.00	75.00	125.00	(0)	16	i	7	15	300	600	1,800
S. Carolina	4,524.40	3,000.00	2,000.00	93		54		40	11,149	13,219	13,392
S. Dakota	6,500.00	5,000.00	7,000.00	280		59	71	86	10,000	26,000	43,560
Tennessee	2,500.00	5,000.00	5,000.00		186	35 27	48	84 36	6,000	10,400	18,915
Texas Utah	540.00 2,000.00	(a) (b)	332. 25 3, 485. 32	(a) (b)	288	45	(a) (b)	25	4,500 6,680	(2) (5)	(b) 26,926
Vermont	5,000.00	5,000.00	5,000.00	68	56		34	28	7,962	7,288	5,160
Virginia	5,000.00	c2,500.00	(b)	c 16	(b)		c7	(b) 78	19,500	c 310	(b)
Washington.	2 066 10	7 476 71	5,000.00	70	240		24	78	(a)	5,250	15,346
W. Virginia. Wisconsin	3,966.12 12,000.00	7,476.71 12,771.09	5,644.41 20,000.00	373 311	365 567	81 81	110 61	112 141	4,480 32,200	24,825 49,989	16,748 89,244
Wyoming	1,107.59		1,000.00	35	46		12	11	3,401	1,292	3,359
		284, 450. 67		11,514	14,934	3,521				1,596,877	

a No institutes held.

Number of lecturers employed by the state directors of farmers' institutes during the year ended June 30, 1998.

		Number of members of	Number of days contrib-		Reports of proceedings.		
State or Territory.	Total number of lecturers on the state force.	agricultural college and experiment station staffs en- gaged in experiment work.	uted to insti- tute work by the agricul- tural college and experi- ment station staff.	Total number of days of institutes held during the year.	Published.	Number of copies.	
AlabamaAlaska a	14	7	210	40	No		
Arizona	3	3	25	56			
Arkansas	6	12	112	64			
California	33	10	100	129	Yes	12,500	
Colorado	21	37		135	No	,	
Connecticut	54	7	35	26			
Delaware	9	5	40	24	Yes		
Florida	14	2		29	No		
Georgia	14	10	110	42	No		
Hawaii	10	19	20	$\frac{4}{22}$	No		
Idaho	10 91	13 30	20	252	Yes	20,000	
IllinoisIndiana	49	9	(2	485	Yes	1,000	
Iowa	16	5	02	150	No	1,000	
Kansas	34	11	190	241	No		
Kentucky	22	10		200	Yes	25,000	
Louisiana a	11						
Maine	25	2		50	Yes	6,000	
Maryland	9		90	61	No		
Massachusetts	58		9	127	Yes	(b)	
Michigan	47	15	46	406	Yes	10,000	
Minnesota	16	3	36	277	Yes	35,000	
Mississippi	23 23	14	140	136	Yes	10,000	
Missouri	23	14 13	120 199	350 79	No Yes	0.000	
Nebraska	44	13	47	294	Yes	6, C00 2, C00	
Nevada a	7	10	21	207	1 63	2,000	
New Hampshire	16	16		16	Yes	1,500	
New Jersey	12	5	20	44	Yes	6,000	
New Mexico	11	6	157	53	No.		
New York	61	20		476	Yes	5,000	
North Carolina	33	10	45	194	Yes	30,000	
North Dakota	7	1	90	100	Yes	10,000	
Ohio	51			596	Yes	20,000	
Oklahoma a	6		111		NT.		
Oregon	16	6	111	34	No	9 000	
Pennsylvania Porto Ricoa	73	10	176	400	Yes	8,000	
Rhode Island	16	7	17	15	Yes	2,500	
South Carolina	10	12	40	41	No	2,300	
South Dakota	8		205	145	No		
Tennessee	17	2 2 5	84	87	Yes	1,350	
Texas.		5	21	36	No	-,,,,,,	
Utah	18	24	427	57	Yes	10,000	
Vermont	13	8	182	28	Yes	4,000	
Virginia b	8						
Washington	18	12	198	103	Yes	1,000	
West Virginia	27	4	65	212	No		
Wisconsin	24 13	15	15 87	123	Yes Yes	60,000	
Wyoming	13	16	87	- 19	1 es	6,000	
Total	1,142	426	3,851	6,528		237,850	
	/	,		-			

a No institutes held.

^b No report.

Appropriations, number of sessions, attendance at institutes in the United States for the year ended June 30, 1908, the approximate population in farm homes in 1900, and the percentage of attendance to the population in farm homes.

State or Territory.	Amount appropriated.	One-half day sessions.	Attend- ance.	Population in farm homes in 1900 (approximate).a	Percentage of attend- ance to population in farm homes.
AlabamaAlaska b	\$1,000.00	73	8,844	1,060,644 127	0. 83
Arizona	1,745.00	56	2,673	30, 362	8. 80
Arkansas	1,500.00	64 294	5,596	870, 878	. 64
California	8,000.00 7,724.46	294 240	27, 912 38, 930	308, 891 104, 701	9. 04 37. 18
Connecticut	1,700.00	53	3,700	119,003	3. 11
Delaware	725. 00	52	4,905	45, 200	10. 84
Florida	2,500.00	39	3,316	184, 989	1. 79
Georgia	4,000.00 74.49	84	12,000 150	1,077,188 5,852	1. 11 2. 56
Idaho	1,000.00	66	5,650	74, 091	7. 63
Illinois	29, 540. 00	627	122, 523	1,219,852	10.04
Indiana	18,000.00	1,112	195, 912	973,870	20. 12
Iowa	7,954.98	400 473	75,000	1,037,811	7. 23 4. 41
Kansas Kentucky	6, 495. 51 8, 982. 85	514	33, 684 21, 690	763, 186 1, 153, 032	1. 88
Louisiana	2,000.00		21,000	554, 031	2.00
Maine	3,000.C0	97	14, 143	243,063	5. 81
Maryland	6,000.00	117	8,903	230, 480	3. 86 11. 12
Massachusetts	4,000.00 8,500.00	156 969	18, 412 121, 654	165, 515 893, 342	13. 62
Minnesota.	20, 454, 50	547	92,091	779, 470	11. 81
Mississippi	5,000.00	274	28, 910	1,075,030	2. 78
Missouri	5,000.00	875	40,000	1,340,079	2. 98
Montana. Nebrasl'a.	7,500.00 13,617.68	156 602	12, 293 93, 824	60, 588 564, 072	20. 29 16. 63
Nevada c	13,017.08	002	90,024	8,170	10.05
New Hampshire	1,000.00	32	2,500	118, 948	2. 10
New Jersey		120	10, 154	160, 111	6. 34
New Mexico	1,425.00 25,000.00	68 1,471	3,685 149,418	55, 272 1, 010, 376	6. 67 14. 79
North Carolina.	7,500.00	423	52,978	1,145,755	4. 62
North Dakota	6, 721. 65	233	38,000	217,657	17. 46
Ohio	23, 986, 15	1,490	461,515	1,237,790	37. 20
Oklahoma. Oregon.	1,285.29 2,500.00	79	7,500	476, 767 163, 761	4, 52
Pennsylvania	23,000,00	989	145, 353	1,077,660	13. 49
Porto Rico b					
Rhode Island	125.00	16	1,800	25, 713	7. 00
South Dakota.	2,000.00 7,000.00	41 290	13,392 43,500	759, 959 249, 776	1. 76 17. 43
Tennessee	5,000.00	186	18, 915	1.135,585	1. 67
Texas	382. 25			1,768,251	
Utah	3, 485. 32	288	26, 926	96,308	27. 96
Vermont. Virginia c.	5,000.C0	56	5, 160	138,820 867,758	3. 72
Washington	5, COO. CO	240	15,346	155, 480	9. 87
West Virginia	5, 644. 41	305	16,748	487,070	3. 44
Wisconsin	20,000.00	567	89, 244 3, 359	823, 478	10. 84
Wyoming	1,000.00	46	5, 559	27, 296	12. 31
Total	325, 569. 54	14, 934	2,098,268	26, 143, 078	9. 33
				·	

This approximation is arrived at by estimating that the number of persons in a farm home is equal to that in other homes, and that the percentage of farm homes is, therefore, also the percentage of rural population.

This estimate is not strictly accurate, for the census enumerators in taking account of farm homes did not include a home, although situated in the country, which "consists of only a dwelling and ground upon which it stands, with appurenances thereto, but is not occupied by what may be termed a farm family." (Census Report of 1900, pt. 2, Population, p. clxxvii.) Neither are there included farm laborers who reside in towns and cities, but who work out on farms. The figures, therefore, given for farm population are below rather than above the actual number engaged in agriculture.

No institutes held.

No institutes reported.

